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Service Manual

Model Name:HG171A

Model No:HSG1033

17” Color TFT LCD Display

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Revision History

Revision	SM Editing Date	ECR Number	Description of Changes	TPV Model
A00	Sep.-10-08		First Version Release	T7RHM5D8AWHZNC
A01	Dec.-02-08		Add new BOM in item 16	T7RHM5DBAWZ3NN

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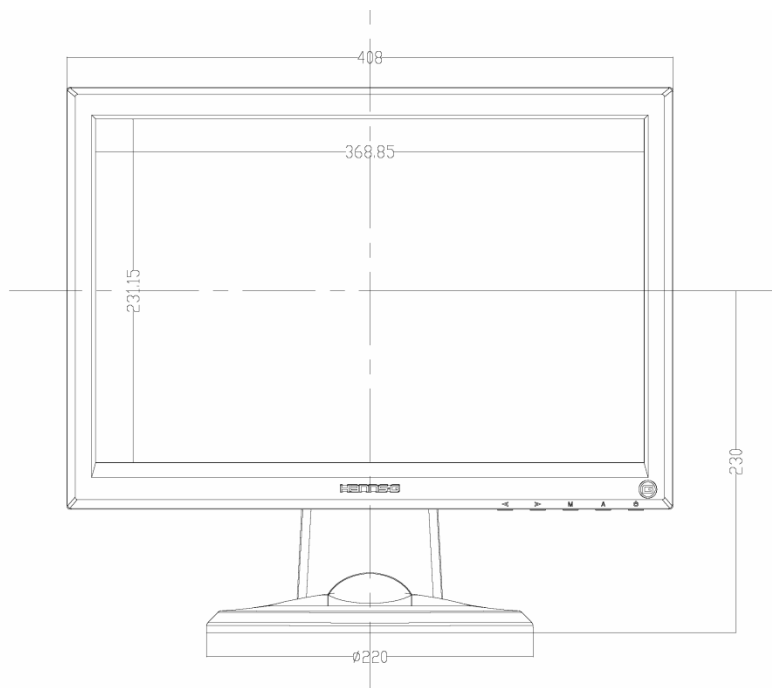
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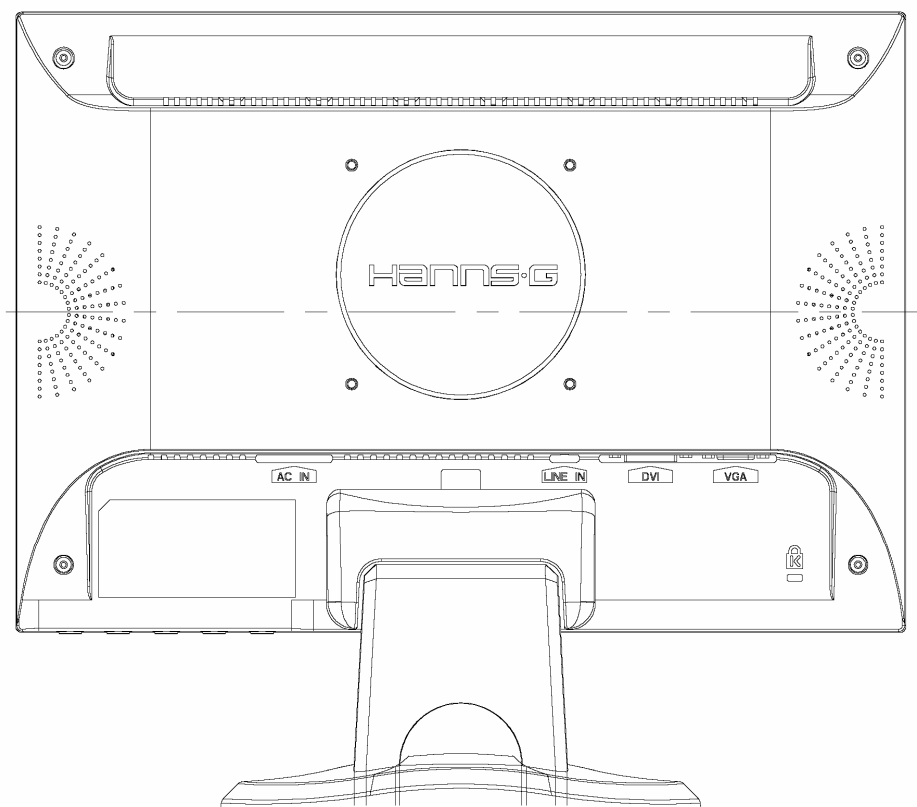
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1. Dimensions

1.1 Front View



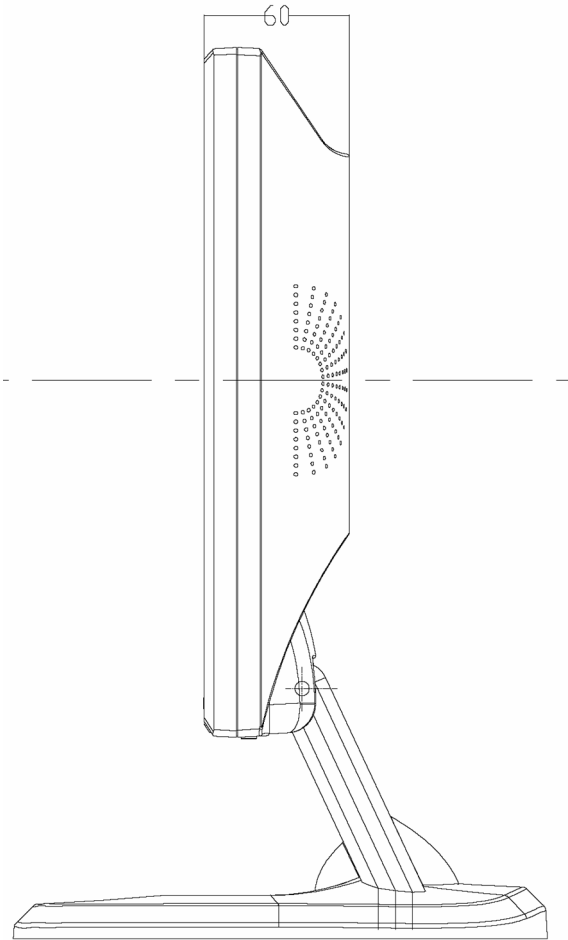
1.2 Back View



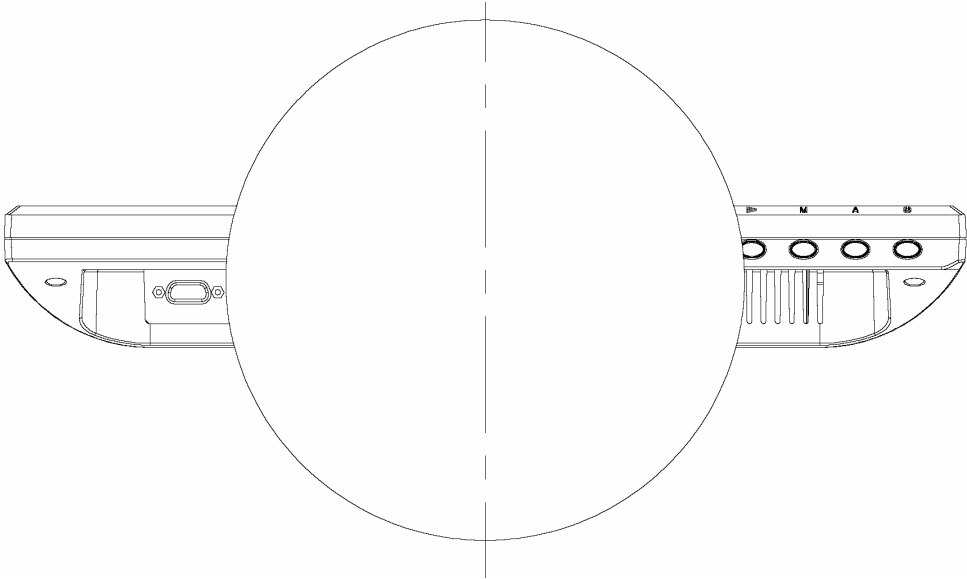
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1.3 Side View



1.4 Bottom View



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2. Precautions and Safety Notices

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design.

Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit.

-Must mount the module using mounting holes arranged in four corners.

-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.

-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.

-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).

-Make certain that treatment person's body is grounded through wristband.

-Do not leave the module in high temperature and in areas of high humidity for a long time.

-Avoid contact with water as it may a short circuit within the module.

-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

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3. Monitor Specifications

LCD Panel	Driving system	TFT Color LCD
	Size	17.0"
	Pixel pitch	0.255mm(H) x 0.255mm(V)
Video	H-Frequency	24KHz – 80KHz
	V-Frequency	55 – 75Hz
Display Colors		16.2M Colors
Max. Resolution		1440 x 900 @75Hz
Plug & Play		VESA DDC2B™
EPA ENERGY STAR®	ON Mode	≤36W
	Power Saving Mode	≤2W
	OFF Mode	≤1W
Input Terminal		D-Sub
Maximum Screen Size		Hor. : 367.2mm Ver. : 229.5mm
Power Source		100~240VAC, 50±3Hz, 60±3Hz
Environmental Considerations		Operating Temp: -5° to 35°C Storage Temp.: -20° to 60°C Operating Humidity: 10% to 85%
Dimensions		408 (W) x 368(H) x 220(D) mm 16.1 "(W)×14.5 "(H)×8.7 "(D)
Weight (NW)		3.3 kg (7.26 lb)

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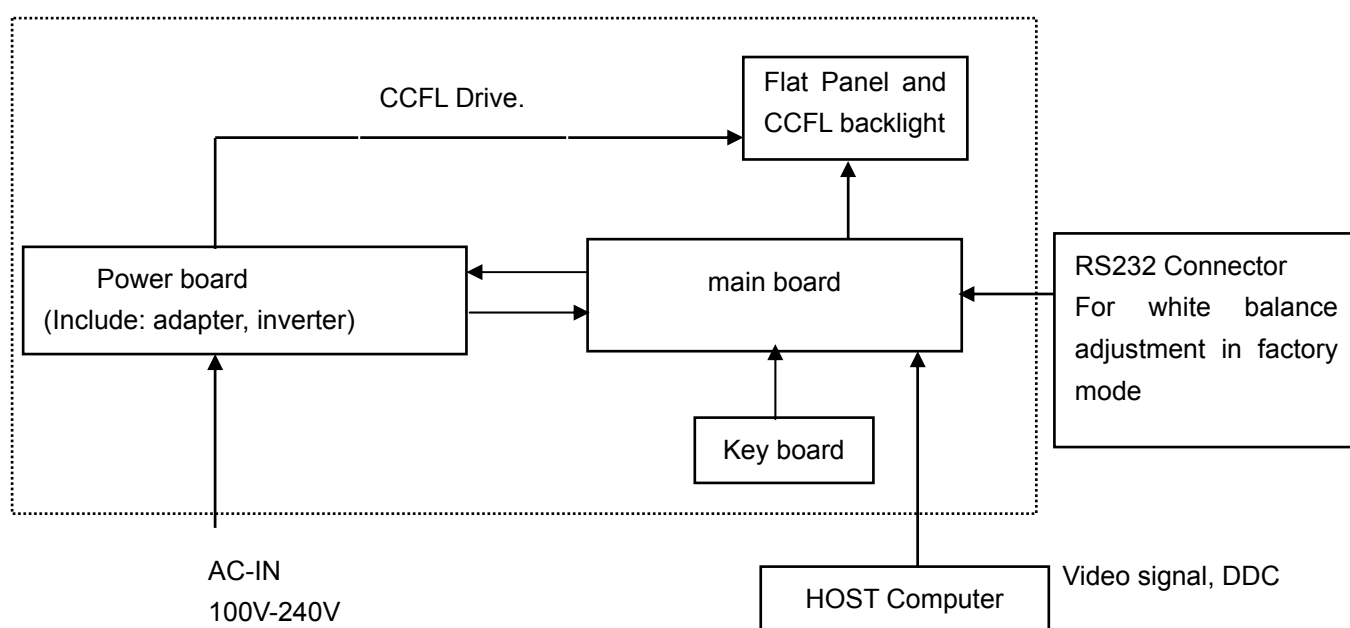
4. LCD Monitor Description

Assembly Description

The LCD MONITOR will contain a main board, a power board, and a key board which house the flat panel control logic, brightness control logic and DDC.

The power board will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.

Monitor Block Diagram



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5. Operating Instructions

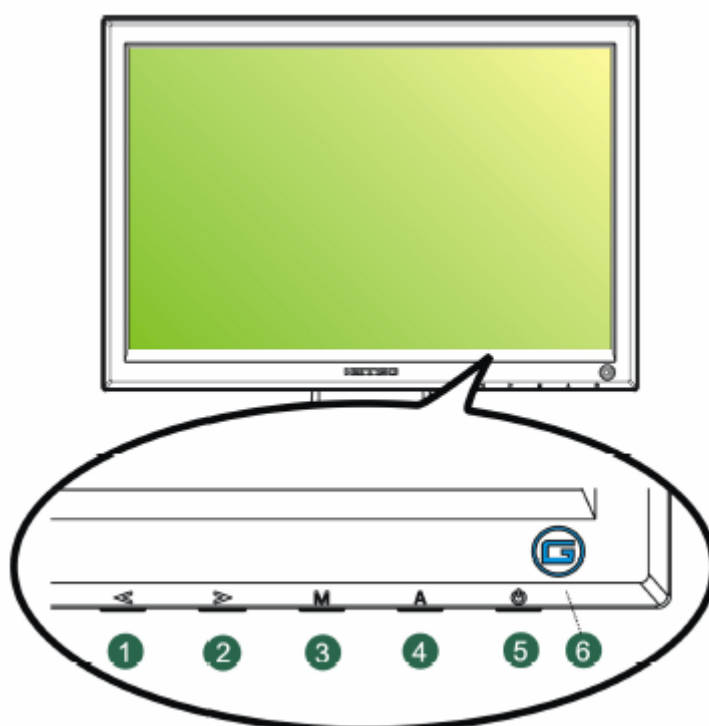
5.1 General Instructions

Press the power button to turn the monitor on or off. The control buttons are located in the front of the monitor.

By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor, the power indicator will light up.

5.2 Control Buttons



1.	< Brightness adjustment button / ▲ [-]	2.	> ▼ [+]
3.	Menu / Return	4.	Auto Adjust / Enter
5.	Power	6.	Power Indicator

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FRONT PANEL CONTROL

• Power Button:

Press this button to switch ON/OFF of monitor's power.

• Power Indicator:

Green — Power On mode.

Orange — Power Saving mode.

• MENU / ENTER:

1. Turn the OSD menu on/off or return to the previous menu
2. Exit OSD menu when in volume OSD status.

• Adjust < >:

1. Activates the volume control when the OSD is OFF.
2. Navigate through adjustment icons when OSD is ON or adjust a function when function is activated.

• A Button:

- The OSD menu is used as [confirmation] function during start-up. 2. Press and hold this button more than 3 seconds will start 「Auto Adjust」 function when using VGA input only. (The auto adjustment function is used to optimize the 「horizontal position」, 「vertical position」, 「clock」, and 「phase」.)

NOTES:

- Do not install the monitor in a location near heat sources such as radiators or air dusts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.
- Save the original shipping box and packing materials, as they will come in handy if you ever have to ship your monitor.
- For maximum protection, repackage your monitor as it was originally packed at the factory.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.

• Function Key Lock:

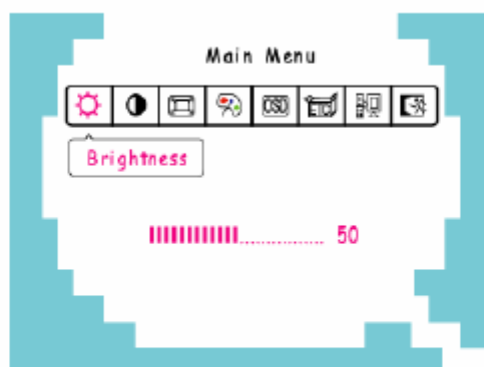
Press the 「<」, 「>」 and the 「Menu」 buttons simultaneously to enable the Function Key Lock. When the Function Key Lock is enabled, only the Power button is active. Press the 「<」, 「>」 and the 「Menu」 buttons simultaneously again to unlock the function keys.

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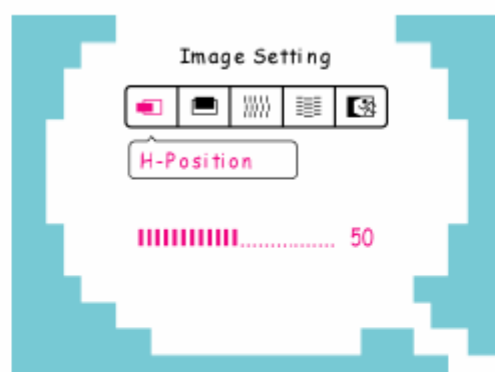
5.3 Adjusting the Picture

Main Menu



FUNCTION	DESCRIPTION
Brightness	Select the 「Brightness」 option on the 「Main Menu」. Enter the option by pressing the 「Menu」 button again, and adjust the level.
Contrast	Select the 「Contrast」 option on the 「Main Menu」. Enter the option by pressing the 「Menu」 button again, and adjust the level.
Image Setting	Select the 「Image Setting」 on the 「Main Menu」, and then enter the option.
Color Setting	Select the 「Color Setting」 option on the 「Main Menu」, and then enter the option.
OSD Setting	Select the 「OSD Setting」 option on the 「Main Menu」, and then enter the option.
Other Setting	Select the 「Other Setting」 option on the 「Main Menu」, and then enter the option.
Input Setting	Select the 「Input Setting」 option to change between the analog (D-Sub) or Digital (DVI) source. Enter the option and select Analog or Digital.
Exit	Exit the OSD menu function.

Image Setting



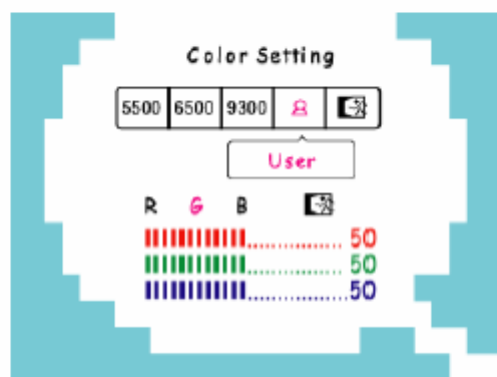
FUNCTION	DESCRIPTION
H-position	Select the 「H-position」 option to shift the screen image to the left or right. Enter the option and adjust the level.
V-position	Select the 「V-position」 option to shift the screen image up or down. Enter the option and adjust the level.

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Clock Adjustment	Select the 「Clock Adjustment」 option to reduce the vertical flicker of characters on the screen. Enter the option and adjust the level.
Phase Adjustment	Select the 「Phase Adjustment」 option to reduce the horizontal flicker of characters on the screen. Enter the option and adjust the level.
Exit	Exit the OSD menu function.

Color Setting



FUNCTION	DESCRIPTION
5500K/6500K/9300K	Move the cursor to one of the preset options and select it.
User	Move the cursor to the User option and select it 1. To adjust the red, enter the 「R」 option and adjust the level. 2. To adjust the green, enter the 「G」 option and adjust the level. 3. To adjust the blue, enter the 「B」 option and adjust the level.
Exit	Exit the OSD menu function.

OSD Setting



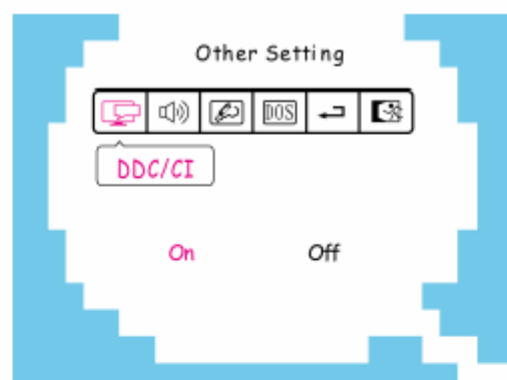
FUNCTION	DESCRIPTION
OSD H-Position	Select the 「OSD H-Position」 option to adjust the horizontal position of the OSD. Enter the option and adjust the level.
OSD V-position	Select the 「OSD V-Position」 option to adjust the vertical position of the OSD. Enter the option and adjust the level.
OSD Time-out	Select the 「OSD Time-out」 option to set the OSD time out from 10 to 120 seconds. Enter the option and adjust the level.
OSD Transparency	Select the 「OSD Transparency」 option to adjust the transparency of the OSD. Enter the option and adjust the level.

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OSD Color	Select the 「OSD Color」 setting option to adjust the color of the OSD. Enter the option and adjust the level.
Language	Select the 「Language」 option to change the language of the OSD. Enter the option and select a language. (Reference only, the OSD Language is depended on selected model)
Exit	Exit the OSD menu function.

Other Setting



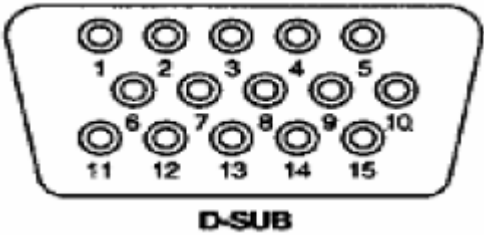
FUNCTION	DESCRIPTION
DDC/CI	Select the 「DDC/CI」 option to switch the function On or Off. (dual input mode optional)
Volume	Select the 「Volume」 option to change the volume level. Enter the option and adjust the level.
Sharpness	Select the 「Sharpness」 option to adjust the sharpness of the display. Set the value from 0 to 6.
DOS mode	Select the 「DOS mode」 option to set the monitor for use with PC. Enter the option and select 720 × 400 or 640 × 400.
Factory Preset	Select the 「Factory Preset」 option to reset to the monitor's default setting. This will erase the current settings. Enter the option and select On or Off.
Exit	Exit the OSD menu function.

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6. Input/output Specification

6.1 Input Signal Connector



Pin	Input signal	Pin	Input signal	Pin	Input signal
1	Red video	6	Red video ground	11	
2	Green video/Sync on green	7	Green video ground	12	Data line (SDA)
3	Blue video	8	Blue video ground	13	H-Sync
4		9	+5V	14	V-Sync
5	Ground	10	Ground	15	Clock line (SCL)

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6.2 Factory Preset Display Modes

MODE	RESOLUTION	HORIZONTAL FREQUENCY (KHz)	VERTICAL FREQUENCY (Hz)
1	640×350 @70Hz	31.469	70.087
2	640×400 @56Hz	24.827	56.424
3	640×400 @70Hz	31.469	70.090
4	640×480 @60Hz	31.469	59.940
5	640×480 @67Hz	35.000	66.667
6	640×480 @72Hz	37.861	72.809
7	640×480 @75Hz	37.500	75.000
8	720×400 @70Hz	31.469	70.087
9	800×600 @56Hz	35.156	56.250
10	800×600 @60Hz	37.879	60.317
11	800×600 @72Hz	48.077	72.188
12	800×600 @75Hz	46.875	75.000
13	832×624 @74.6Hz	49.725	74.500
14	1024×768 @60Hz	48.363	60.004
15	1024×768 @66Hz	53.964	66.132
16	1024×768 @70Hz	56.476	70.069
17	1024×768 @75Hz	60.023	75.029
18	1024×768 @75Hz	60.150	74.720
19	1152×864 @75Hz	67.500	75.000
20	1152×870 @75Hz	68.681	75.062
21	1152×900 @66Hz	61.846	66.004
22	1280×720 @60Hz	45.000	60.000
23	1280×768 @60Hz	47.776	59.870
24	1280×960 @60Hz	60.000	60.000
25	1280×1024 @60Hz	63.981	60.020
26	1280×1024 @75Hz	79.976	75.025
27	1360×768 @60Hz	47.712	60.015
28	1400×1050 @60Hz	64.744	59.948
29	1400×1050 @60Hz	65.317	59.978
30	1400×1050 @75Hz	82.278	74.867
31	1440×900 @60Hz	55.469	59.901
32	1440×900 @60Hz	55.935	59.887
33	1440×900 @75Hz	70.635	74.984

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6.3 Panel Specification

HannStar Display model HSD170MGW1-B00 is a color active matrix thin film transistor(TFT) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching device. This model is composed of a TFT LCD panel, a driving circuit and a back light system. This TFT LCD has a 17.0 inch diagonally measured active display area with XGA resolution (900 vertical by 1440 horizontal pixel array) and can display up to 16.2M (6-bit+FRC)colors.

6.3.1 Features

- _ 17.0 WXGA+ for Monitor application
- _ High Resolution: 1440*900
- _ 2-ch LVDS interface system
- _ LCD Timing Controller
- _ Wide Viewing Angle
- _ RoHS compliance

6.3.2 Display Characteristics

Item		Specification
Outline Dimension		389.2 x 254.5 x 11.5 (Typ)
Display area		367.2 (H) x 229.5 (V)
Number of Pixel		1440(H) x 900(V)
Pixel pitch		0.255(H) x 0.255(V)
Pixel arrangement		RGB Vertical stripe
Display color		16.2M (6-bit+FRC)
Color Gamut		63% NTSC
Display mode		Normally white
Surface treatment		Antiglare (3H)
Weight		1400
Back-light		2-CCFLs, Top & bottom edge side
Input signal		2-ch LVDS
Power Consumption	Logic System	TBD
	B/L System	TBD

6.3.3 Electrical Characteristics

1. TFT LCD Module

Item	Symbol	Min.	Max.	Unit
Power supply voltage	V _{DD}	-0.3	6.0	V
Logic input voltage	V _{IN}	-0.3	V _{DD} +0.3	V

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2. Backlight Unit

Item	Symbol	Min.	Max.	Unit
Lamp current	I_L	3	9.0	mA
Lamp frequency	f_L	30	80	KHz

6.3.4 Optical Characteristics

Measuring Condition


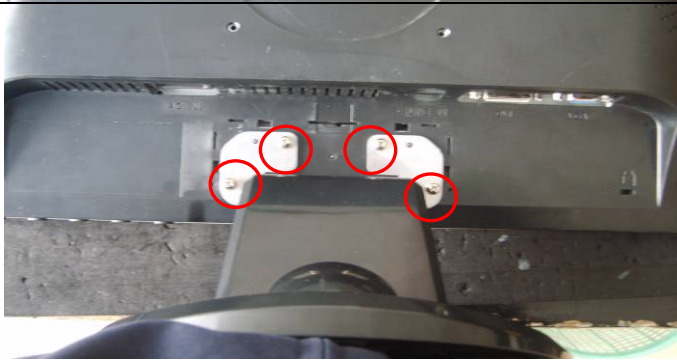

- _ Measuring surrounding: dark room
- _ Lamp current IBL: 7.5 ± 0.1 mA, lamp freq. FL=50 KHz, Inverter: TDK TBD315NR-1
- _ VDD=5.0V, fV=60Hz
- _ Ambient temperature: 25 ± 2 °C
- _ 30min. Warm-up time.

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Contrast		CR	$\theta = 0$ viewing angle - -	-	600	-	msec
Response time	Rising	T _R		-	3	5	
	Falling	T _F		-	5	7	
White luminance (Center)		Y _L		-	250	-	cd/m ²
Color chromaticity (CIE1931)	Red	R _x			TBD		
		R _y			TBD		
	Green	G _x			TBD		
		G _y			TBD		
	Blue	B _x			TBD		
		B _y			TBD		
	White	W _x			0.310		
		W _y			0.330		
Viewing angle	Hor.	θ _L	CR>10		(80)	-	
		θ _R			(80)	-	
	Ver.	θ _U			(80)	-	
		θ _D			(80)	-	
Brightness uniformity		B _{UNI}	θ=0	70	75	-	%

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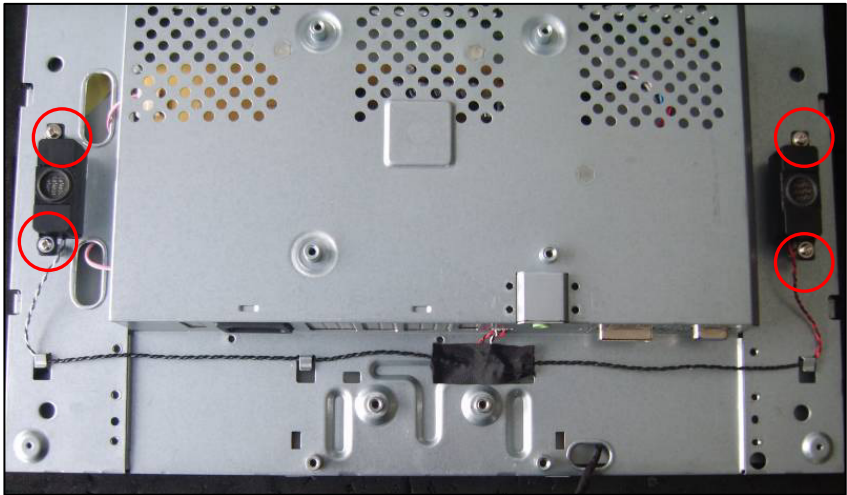
7. Mechanical Instructions

Step	Figure	Description
Preparation		Lay the LCD on a flat, soft and clean surface.
Remove the base		Remove the screws remarked in red
Remove rear cover		Remove the screws remarked in red

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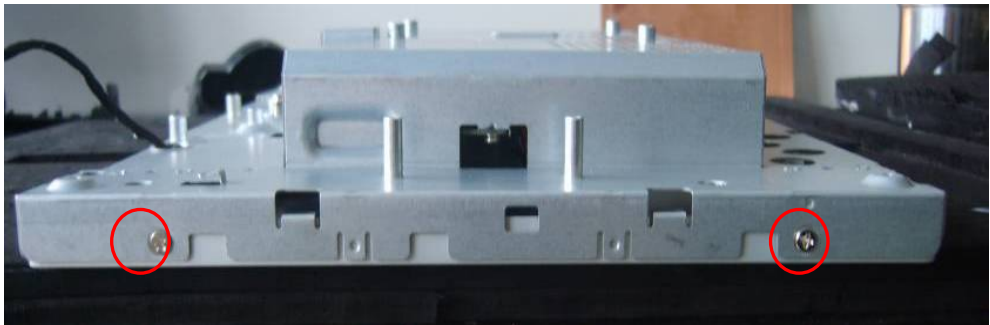
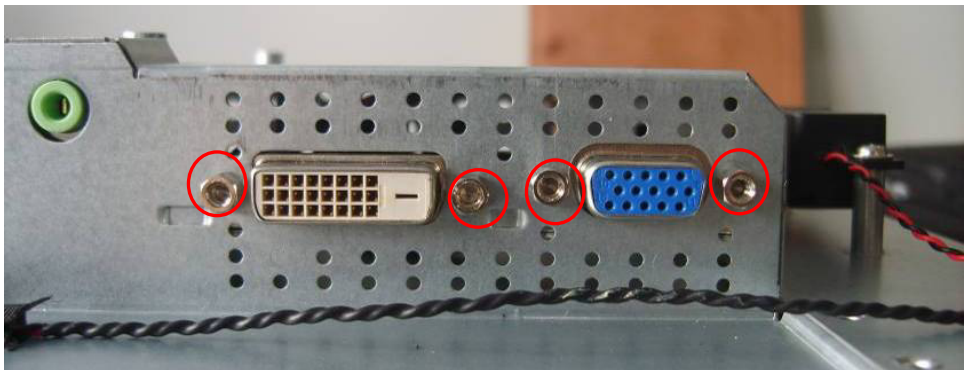
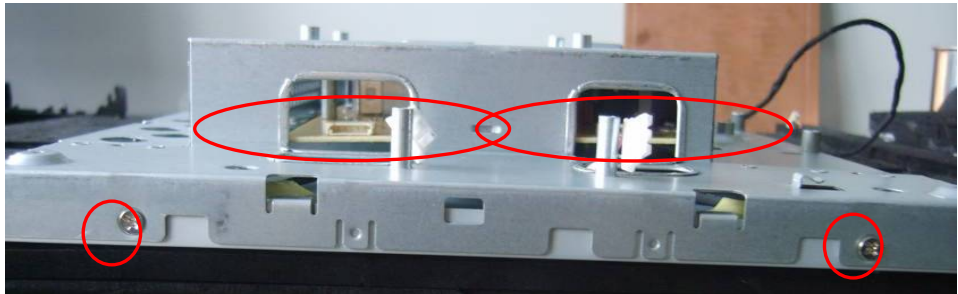
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Remove the speaker



Remove the screws remarked in red

remove the shield

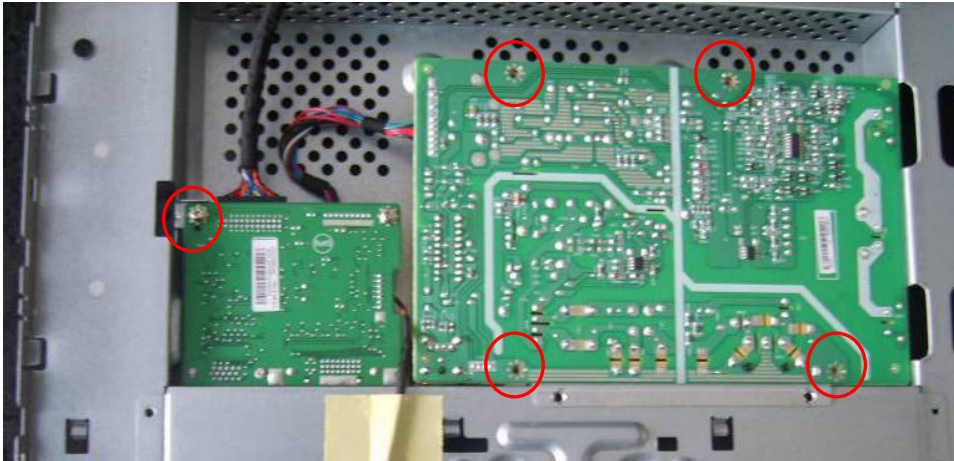


Remove the screws remarked in red and disconnect the connector remarked in red (HG171A: NO DVI)

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Remove
the
boards



Remove the
screws
remarked in
red

The end



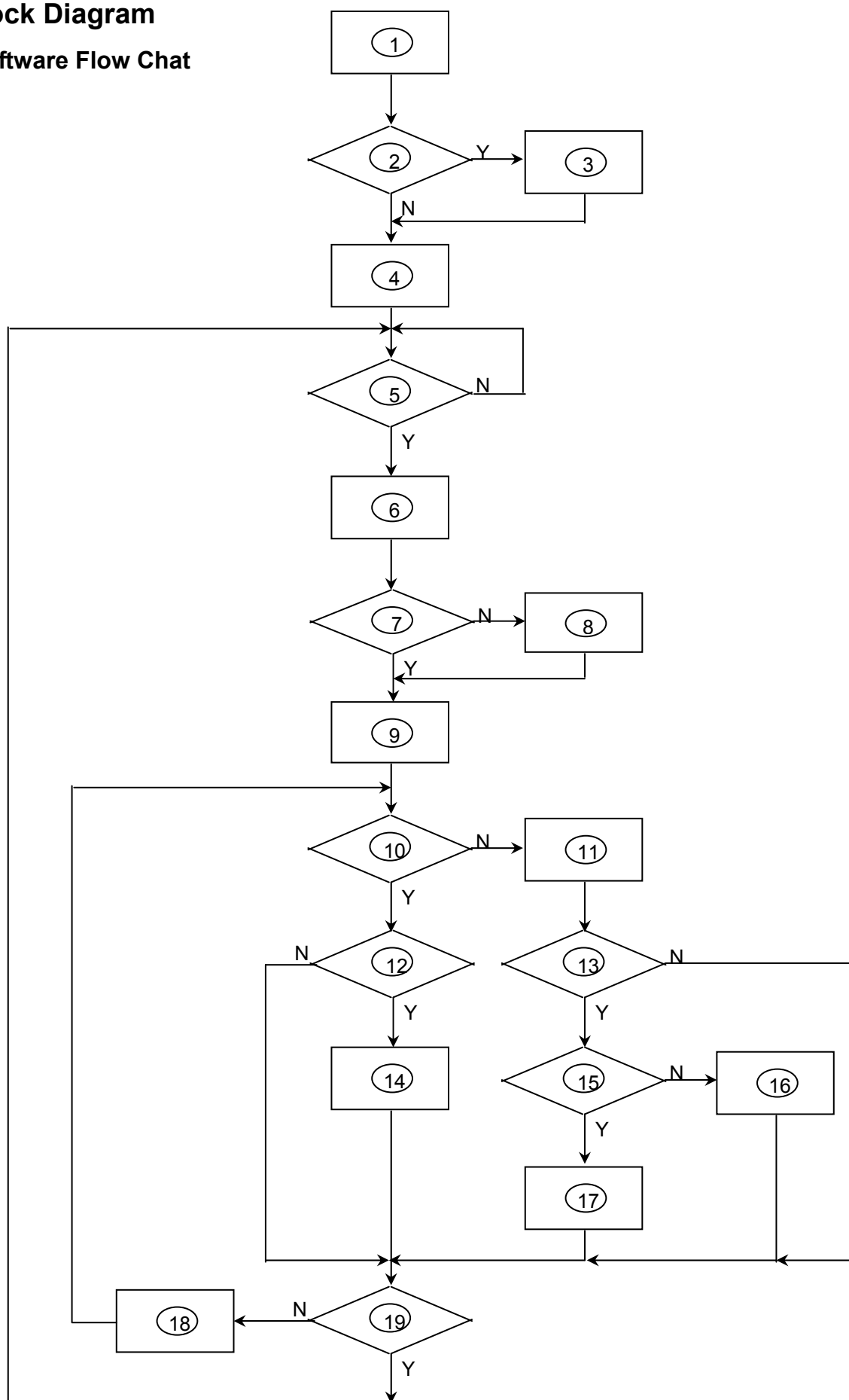
The panel

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8. Block Diagram

8.1 Software Flow Chat



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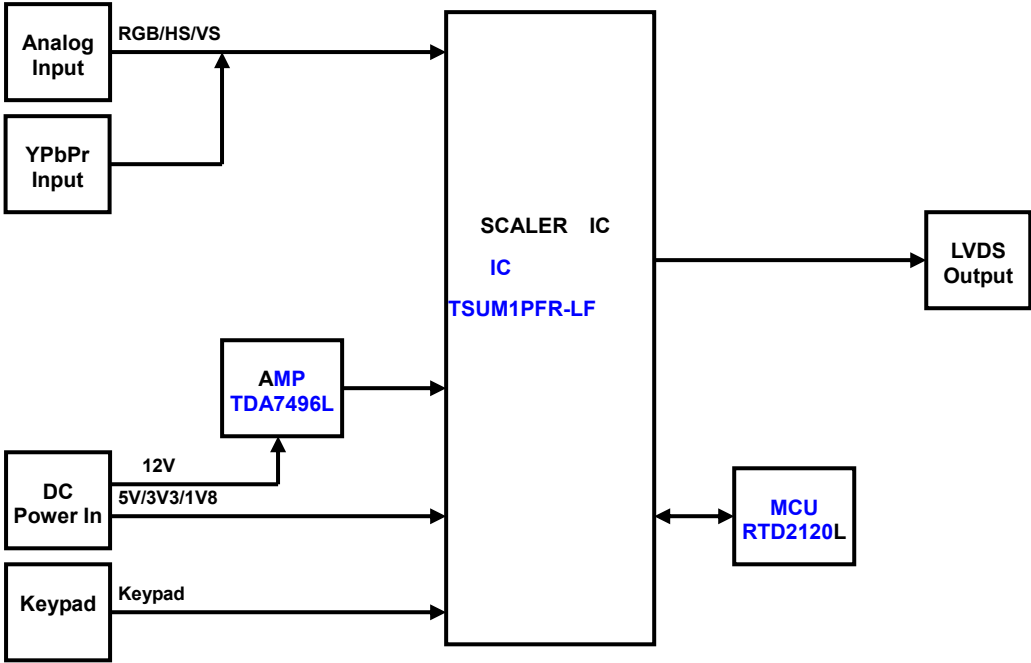
- 1) MCU initialize.
- 2) Is the EPROM blank?
- 3) Program the EPROM by default values.
- 4) Get the PWM value of brightness from EPROM.
- 5) Is the power key pressed?
- 6) Clear all global flags.
- 7) Are the AUTO and SELECT keys pressed?
- 8) Enter factory mode.
- 9) Save the power key status into EPROM.
Turn on the LED and set it to green color.
Scalar initializes.
- 10) In standby mode?
- 11) Update the lifetime of back light.
- 12) Check the analog port, are there any signals coming?
- 13) Does the scalar send out an interrupt request?
- 14) Wake up the scalar.
- 15) Are there any signals coming from analog port?
- 16) Display "No connection Check Signal Cable" message. And go into standby mode after the message disappear.
- 17) Program the scalar to be able to show the coming mode.
- 18) Process the OSD display.
- 19) Read the keyboard. Is the power key pressed?

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8.2 Electrical Block Diagram

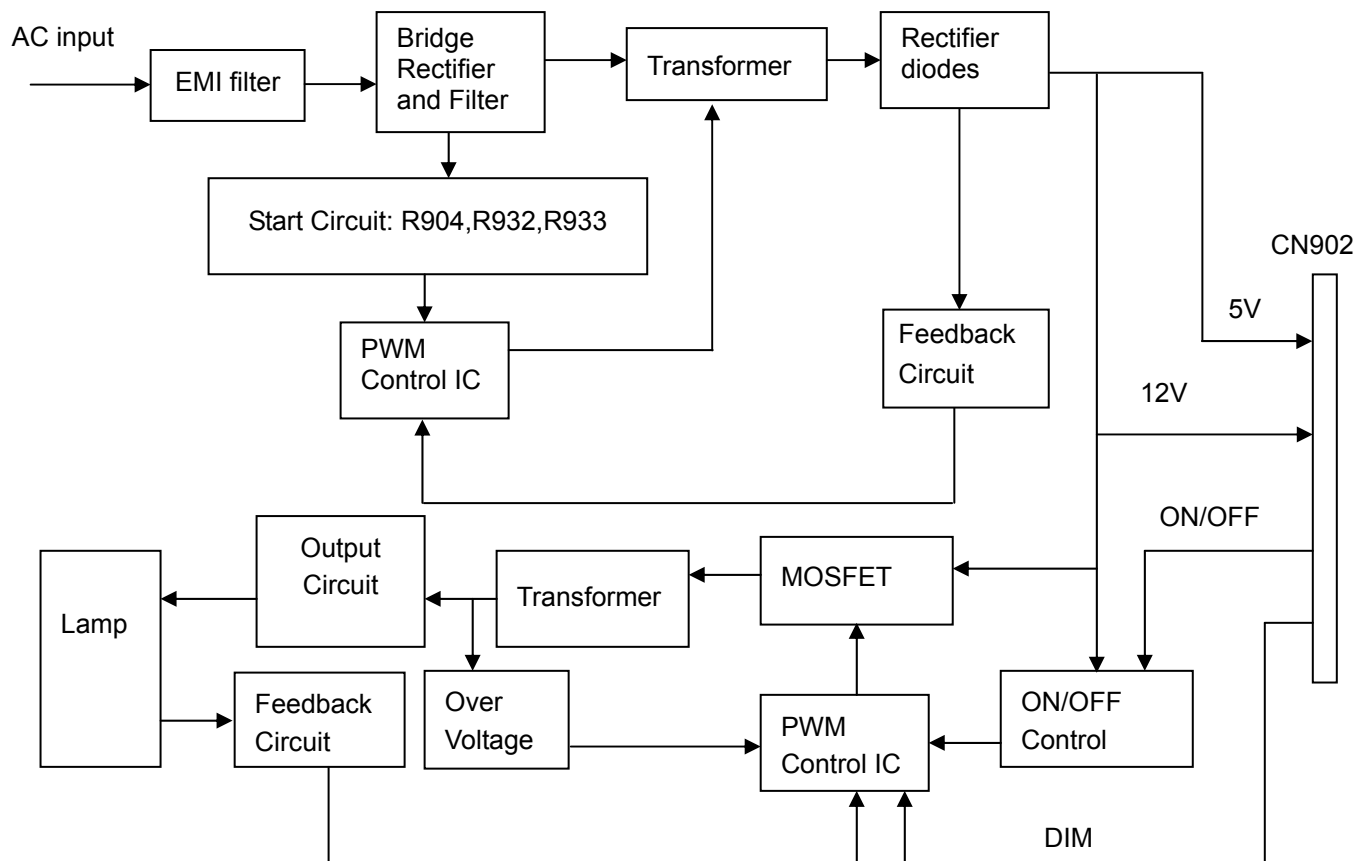
8.2.1 Main Board



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8.2.2 Power/Inverter Board

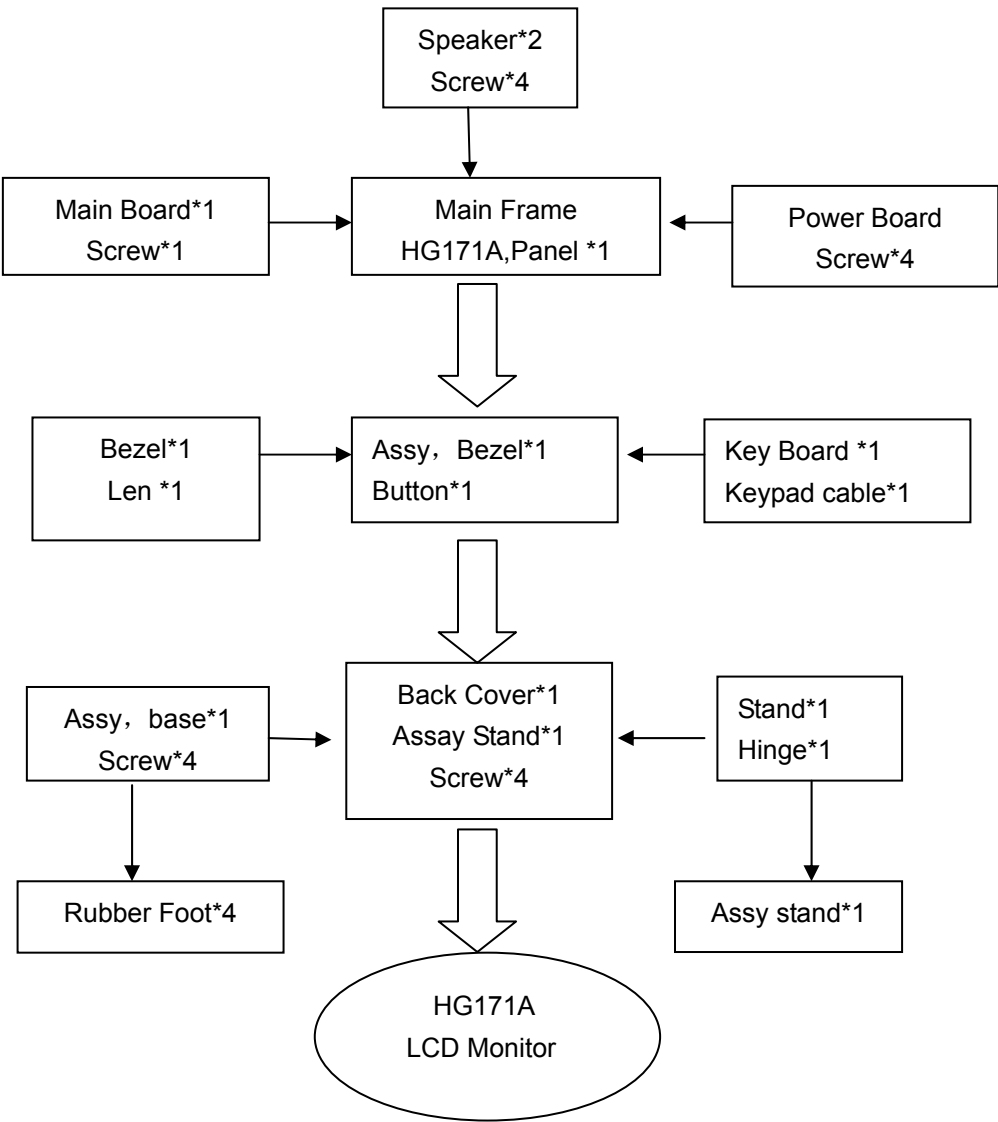


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8.3 Mechanical Block Diagram

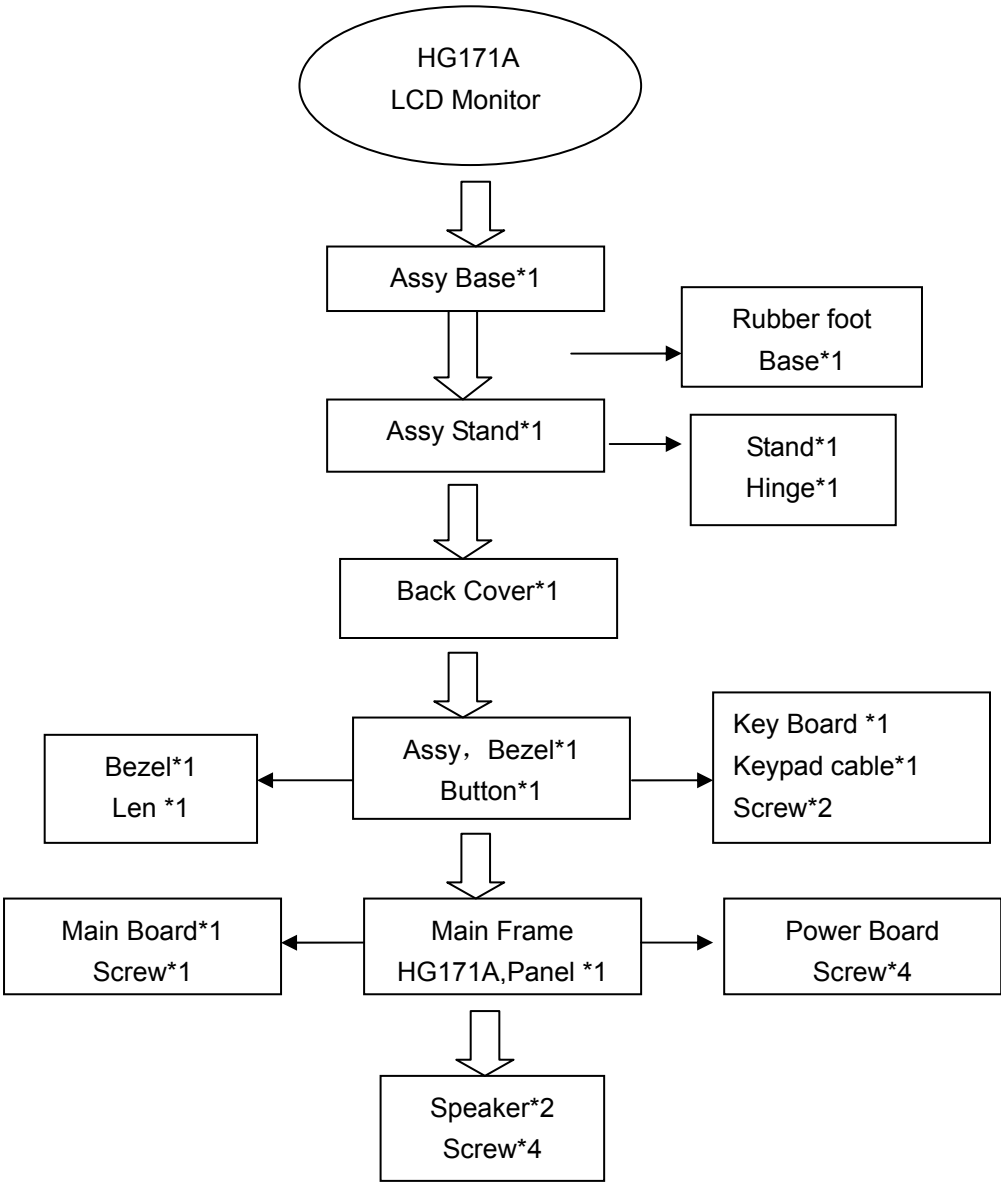
8.3.1 Assembly Block



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8.3.1 Disassembly Block



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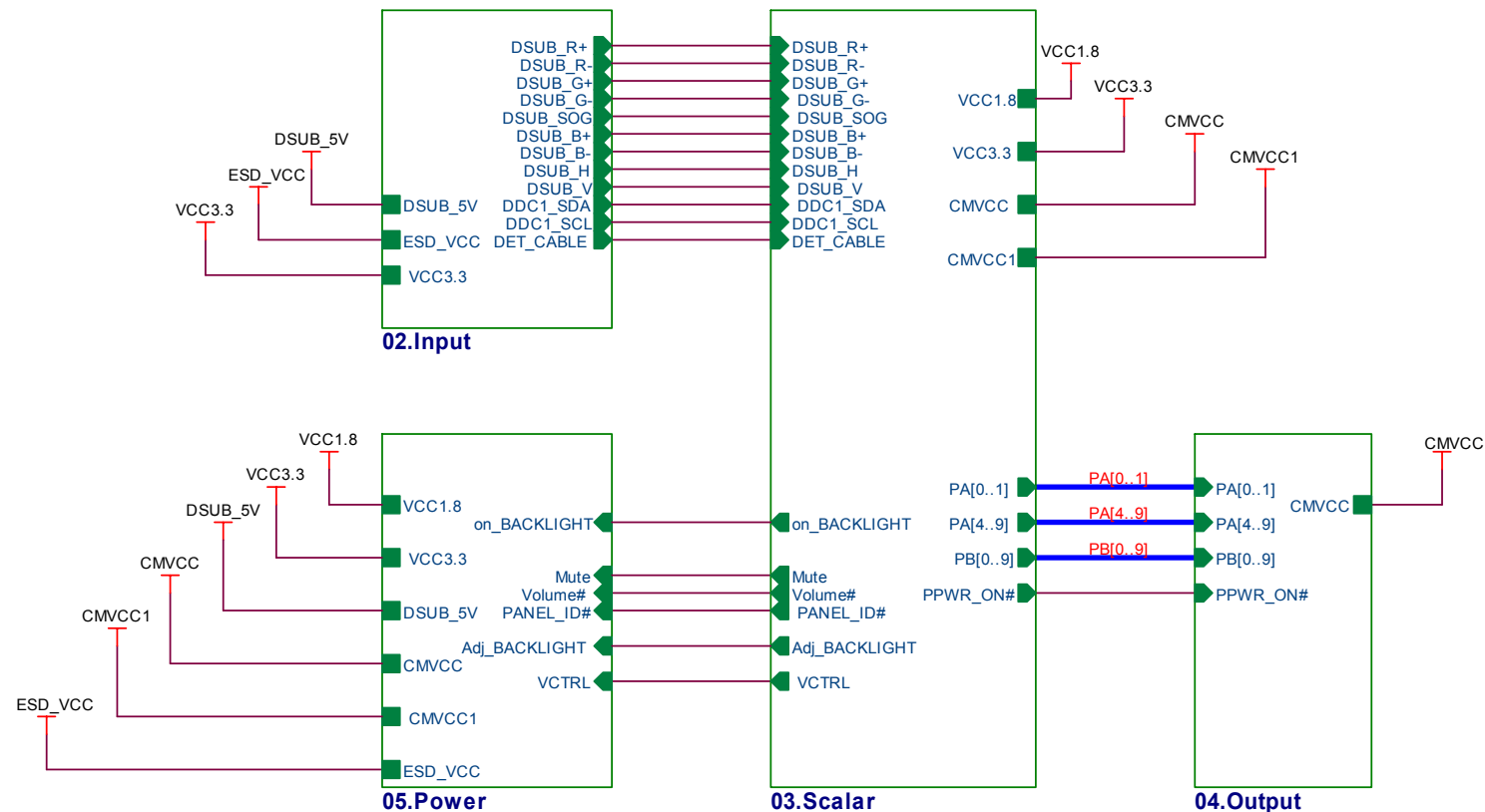
9. Schematic

9.1 Main Board

TSUM16FWR SCHEMATIC

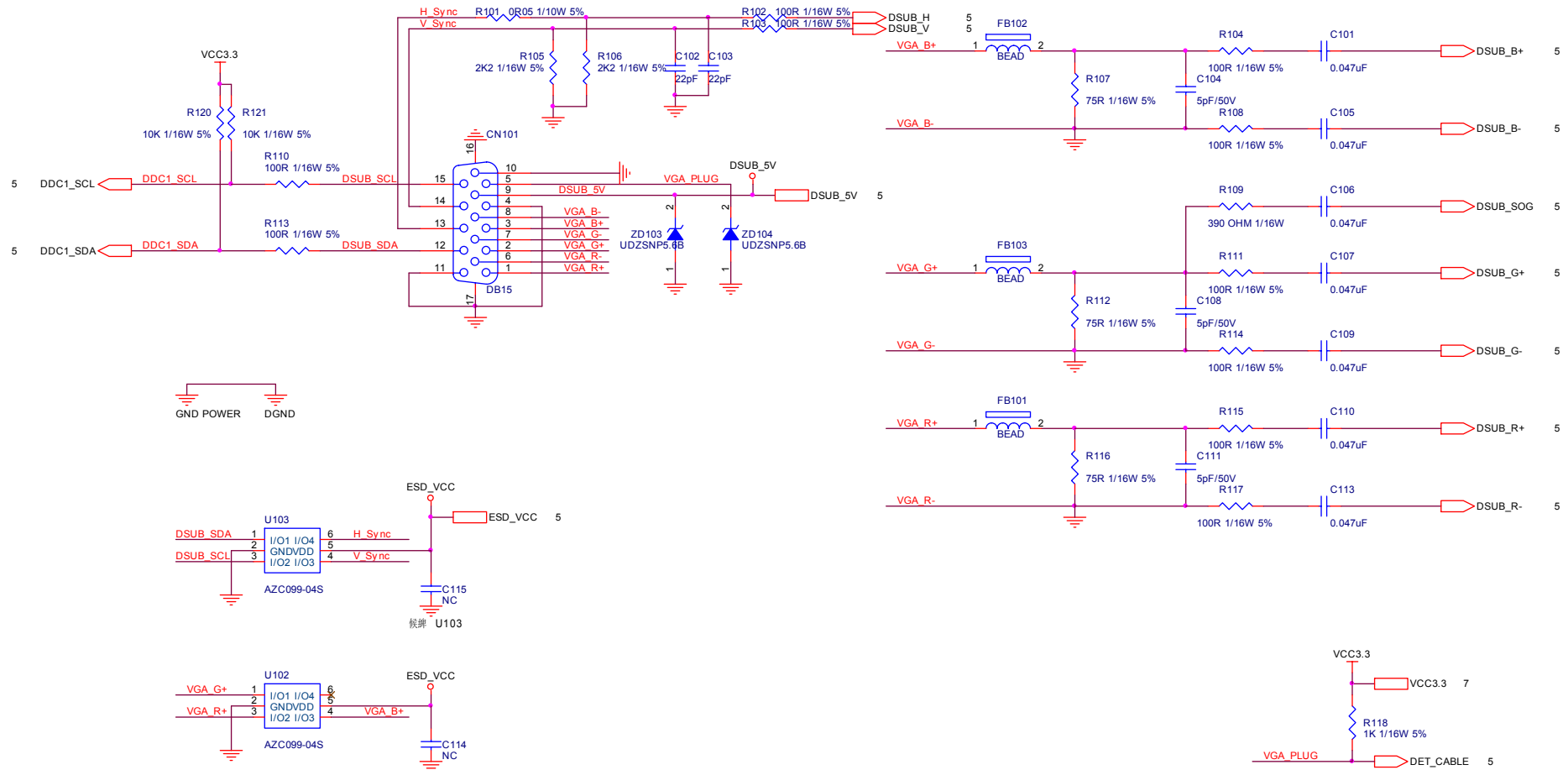
XGA/SXGA

LVDS OUTPUT



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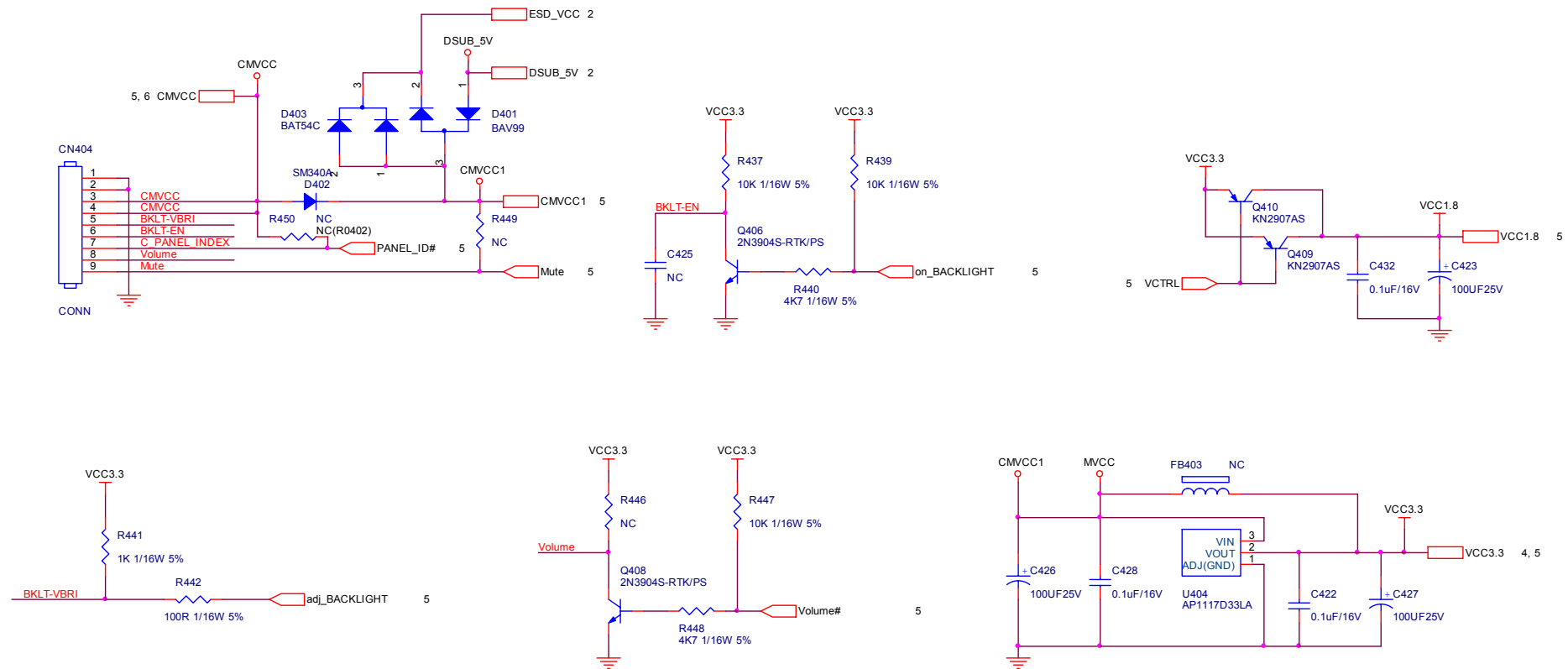
08/09/09



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	HG171A	Size	B
話隔瓜爾	G2904-1D-2-X4-080728	TPV MODEL	Rev	F
Key Component	02.Input	PCB NAME	715G2904-1D	称
Date	Monday, July 21, 2008	Sheet	4 of 7	<称>

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T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL	HG171A	Size	B
銘 隔 爪 鋼 版	G2904-1D-2-X-4-080728	TPV MODEL	Rev	F
Key Component	05.Power	PCB NAME	715G2904-1D	称 参
Date	Monday, July 21, 2008	Sheet	7 of 7	<称 参>

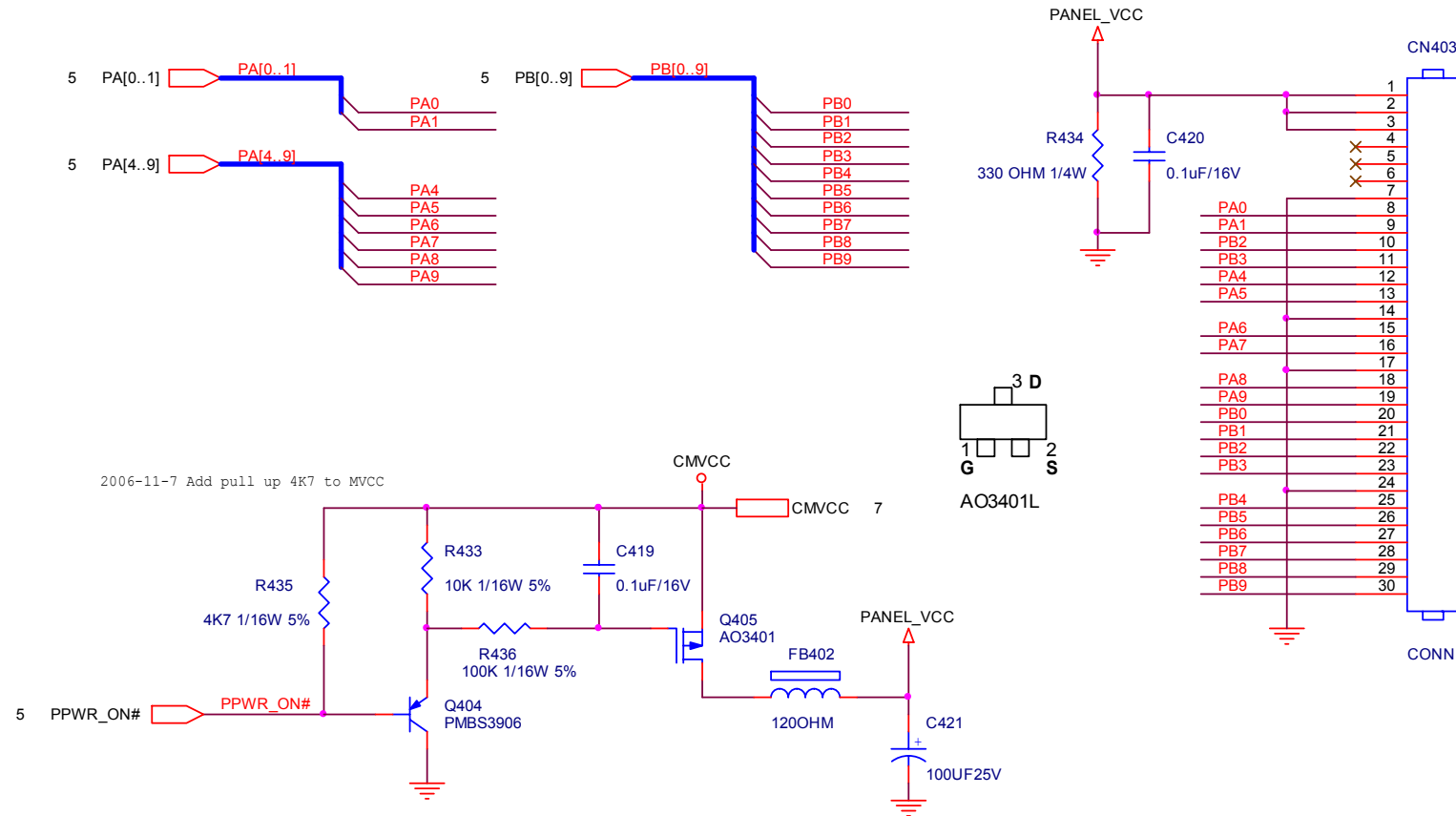
The schematic diagram illustrates the internal circuitry of the Tsumipfr-LF module, centered around the U401 (Tsumipfr-LF) and U402 (SST25LF020A) chips. The diagram shows various power supply rails (VCC3.3, VDDP, VDDC, CMVCC) and their decoupling components (resistors, capacitors, inductors). It also details the connections for the module's pins, including the DSUB connector (pins 3-19), the LVDS connector (pins 20-59), and the Tsumipfr-LF connector (pins 1-8). The diagram includes a detailed view of the module's internal components, such as the U401 and U402 chips, and the various resistors and capacitors used for signal conditioning and power management. The diagram is labeled with component values and pin numbers, providing a comprehensive view of the module's internal structure.

TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	HG171A	Size	C
話筒底面圖	G2904-1D-2-X4-080728	TPV MODEL	Rev	F
Key Component	03.Scaris	PCB NAME	715G2904-1D	
Date	Wednesday, July 30, 2008	Sheet	6 of 7	修華 <修華>

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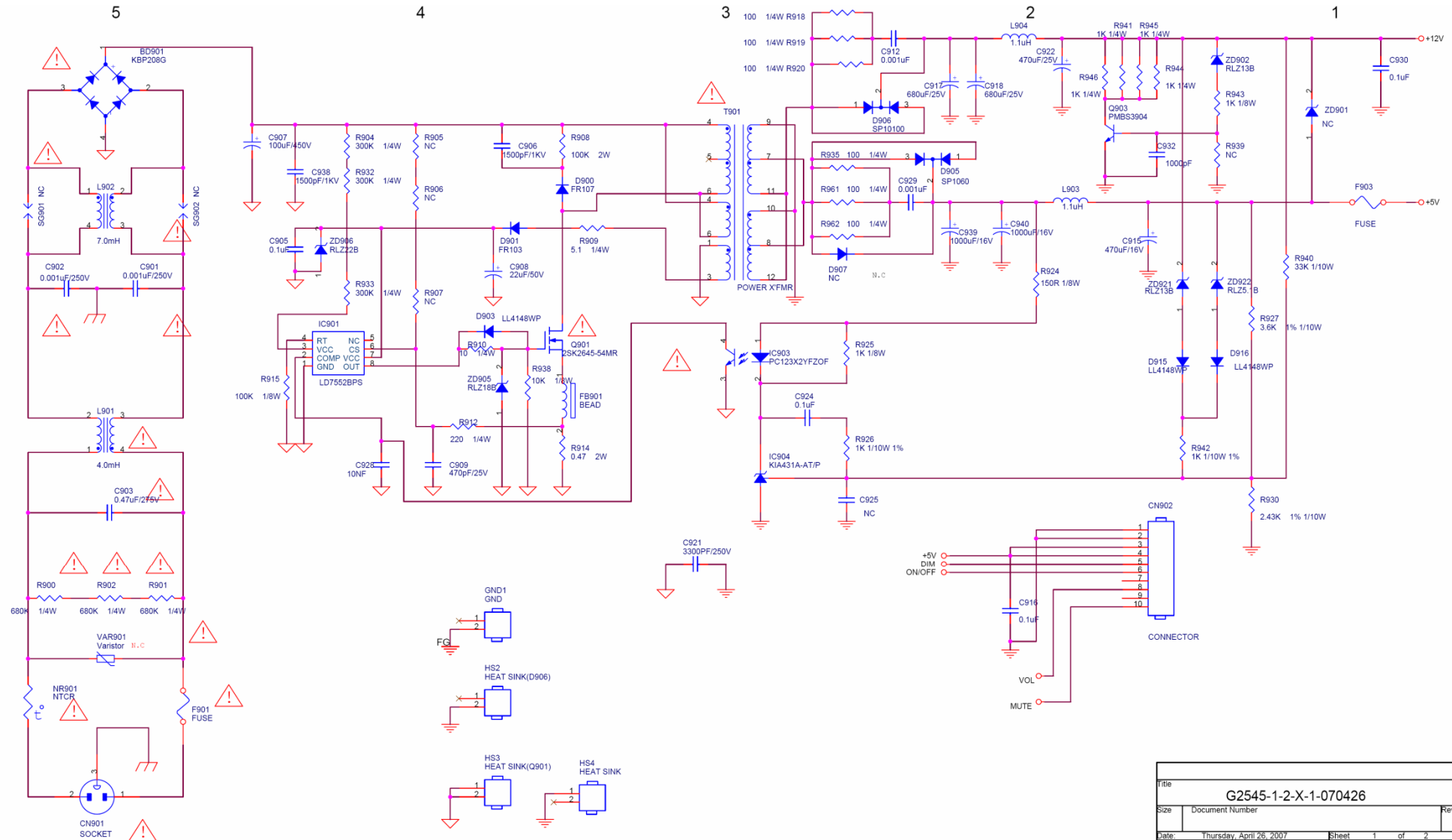


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	HG171A	Size	A
紙隔瓜網腹	G2904-1D-2-X4-080728	TPV MODEL	Rev	F
Key Component	04.Output	PCB NAME	715G2904-1D	称爹
Date	Monday, July 21, 2008	Sheet	6 of 7	<称爹>

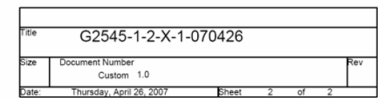
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9.2 Power Board



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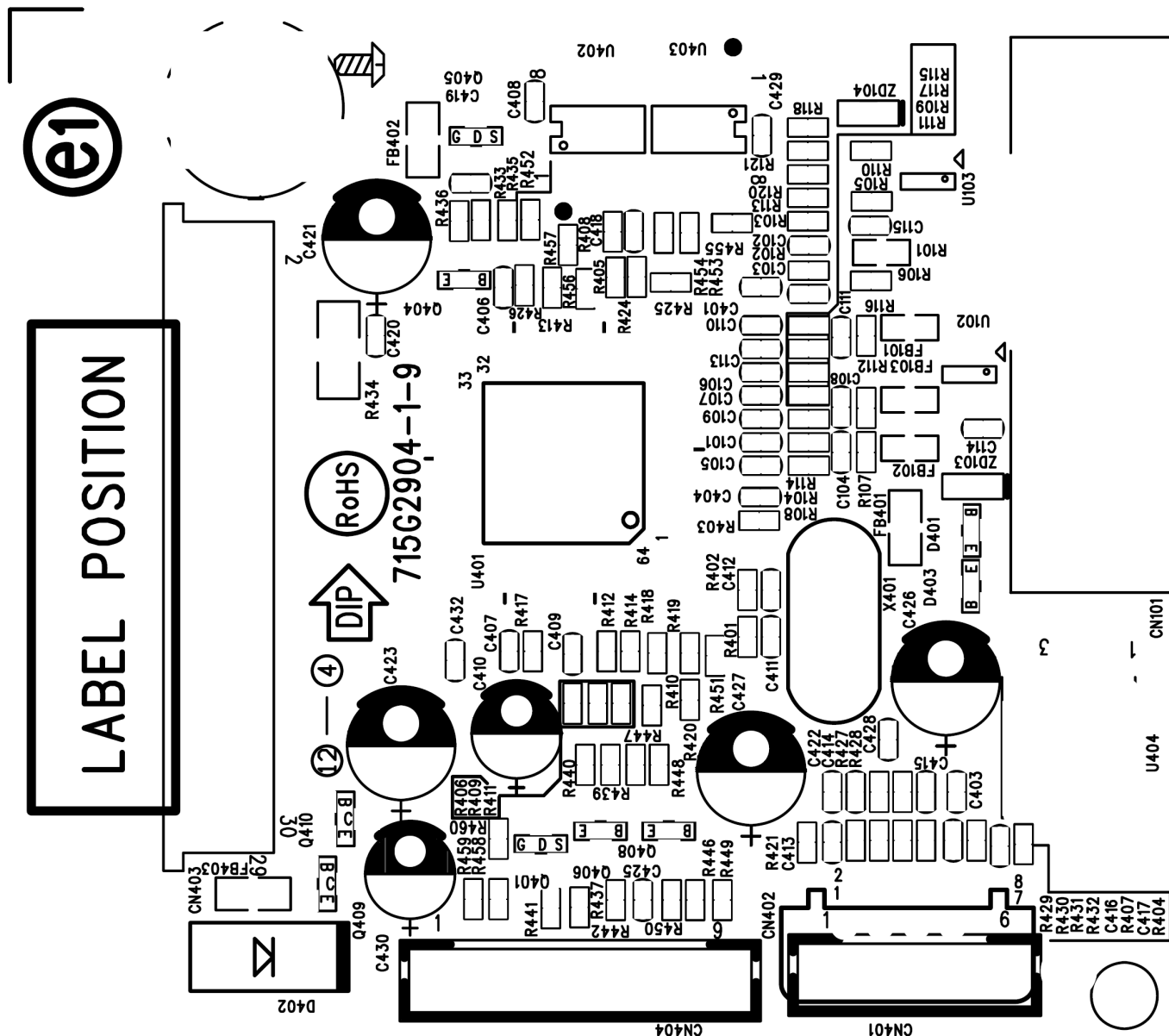
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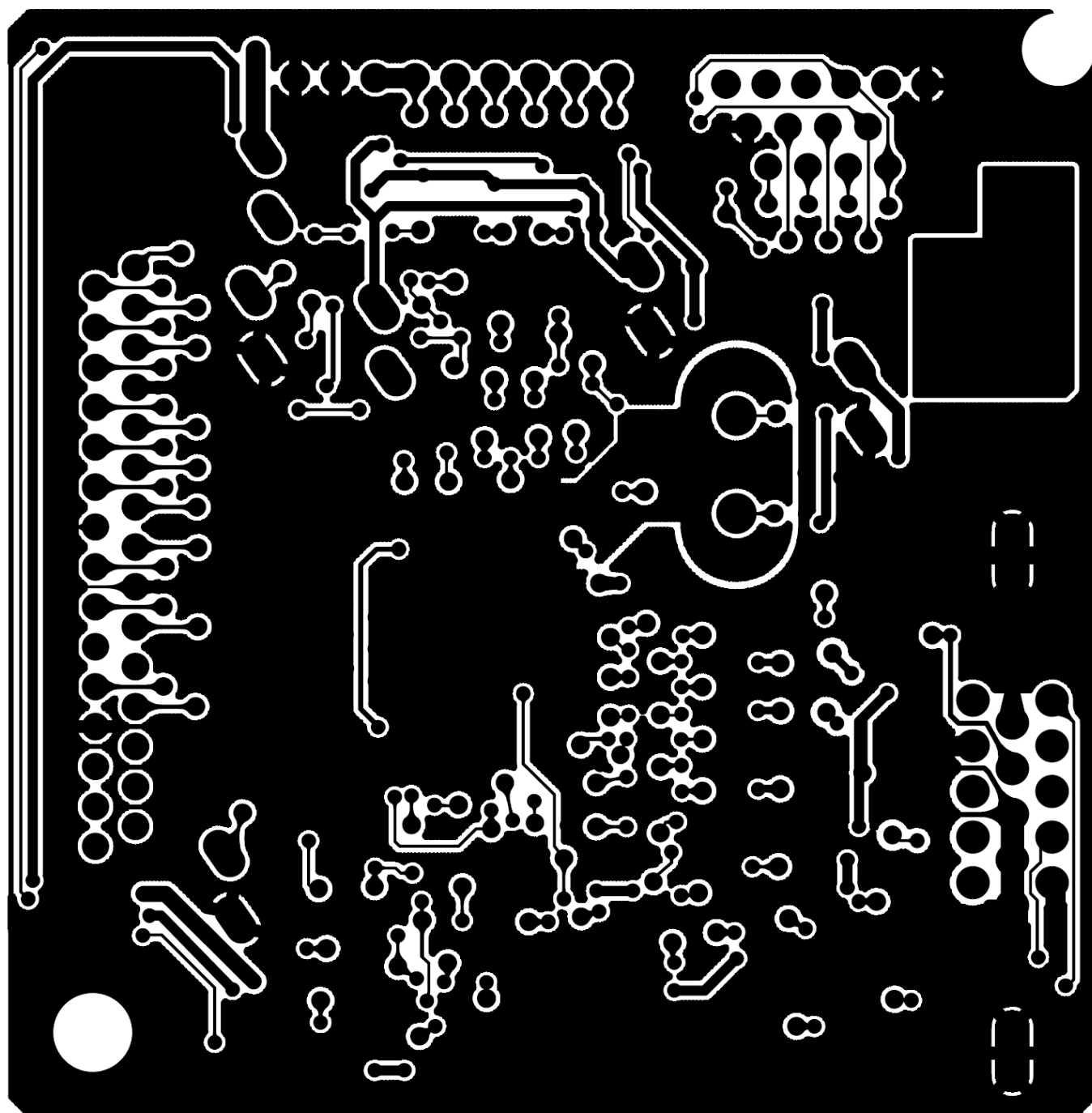
10. PCB Layout

10.1 Main Board



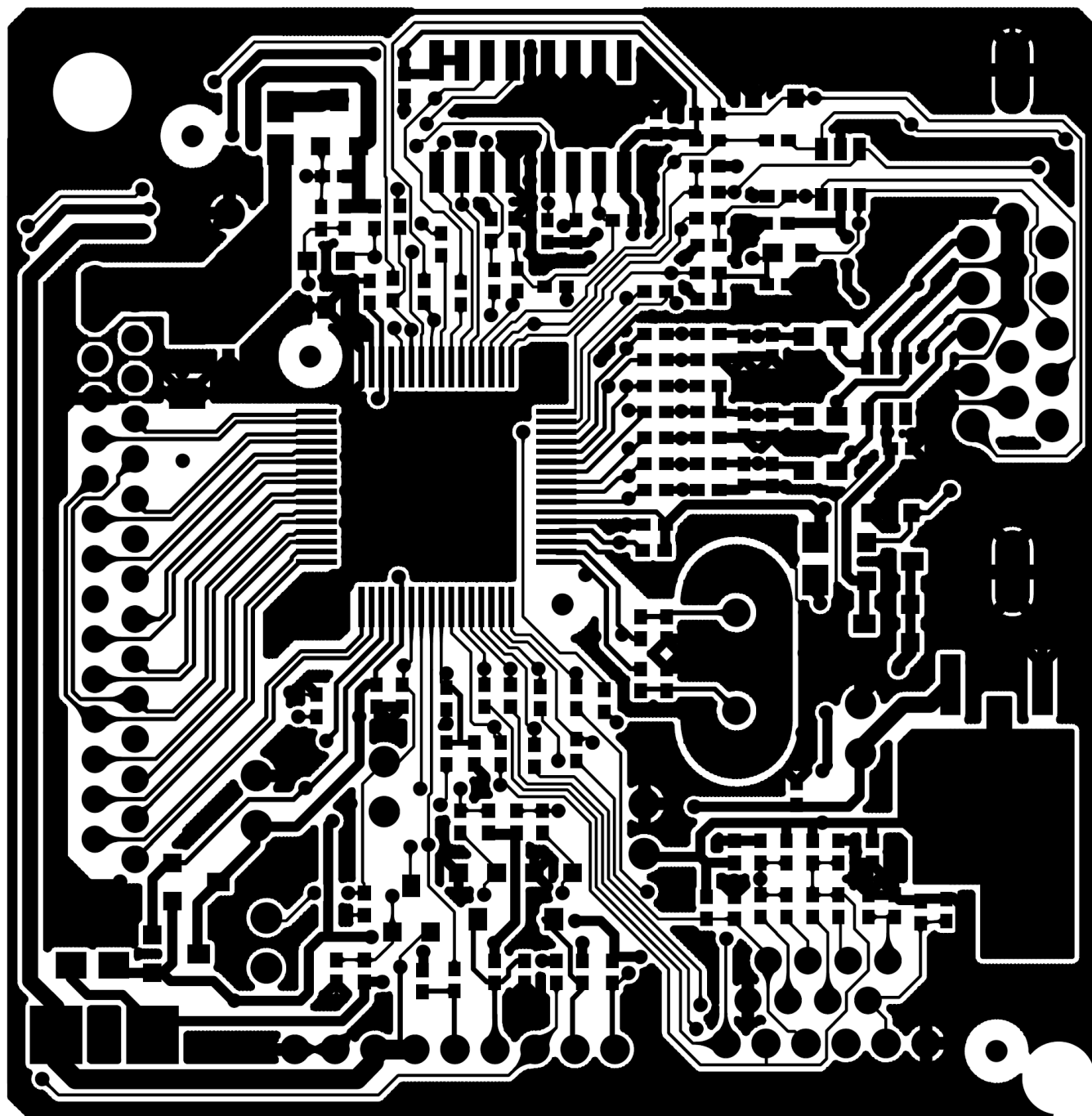
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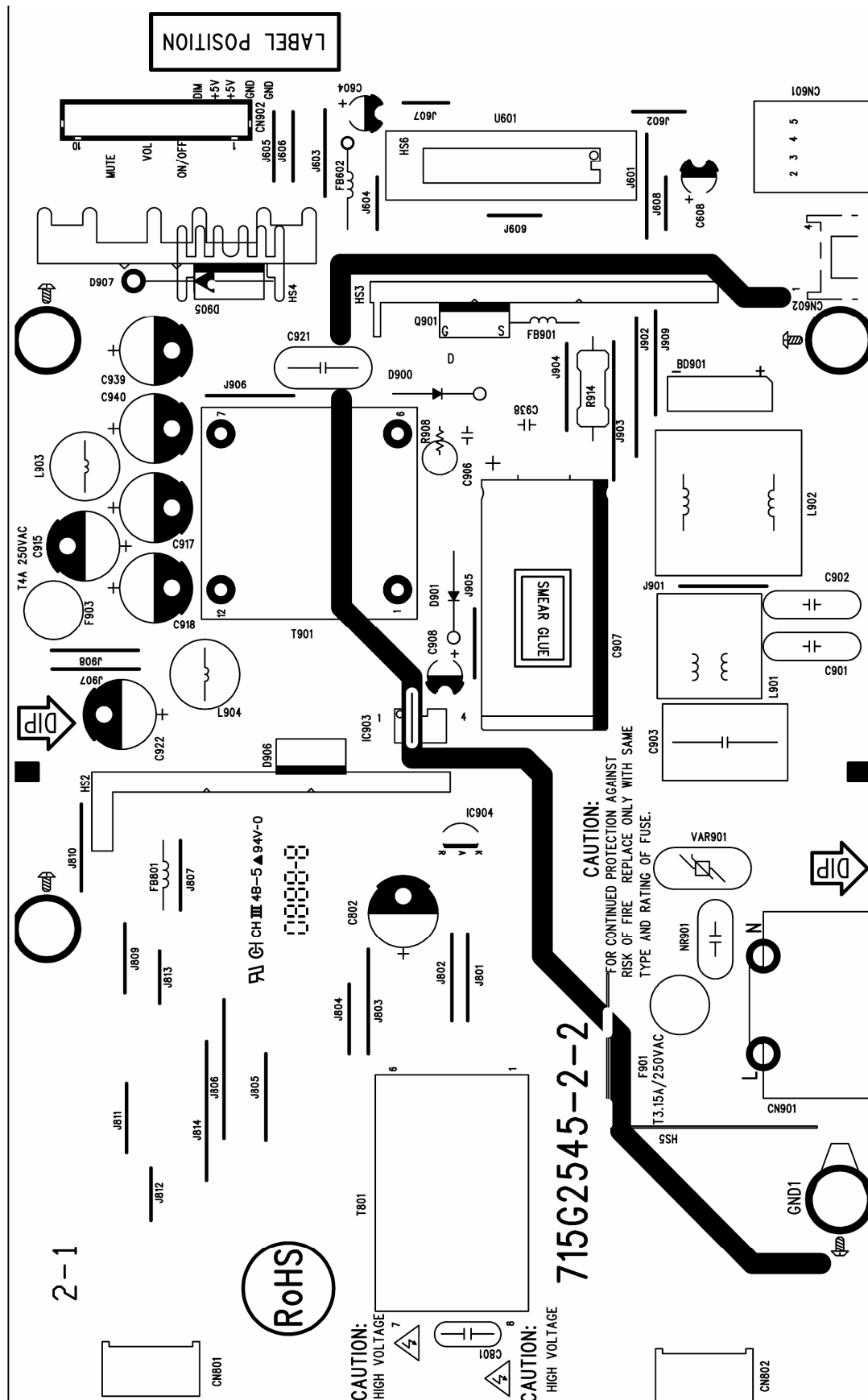
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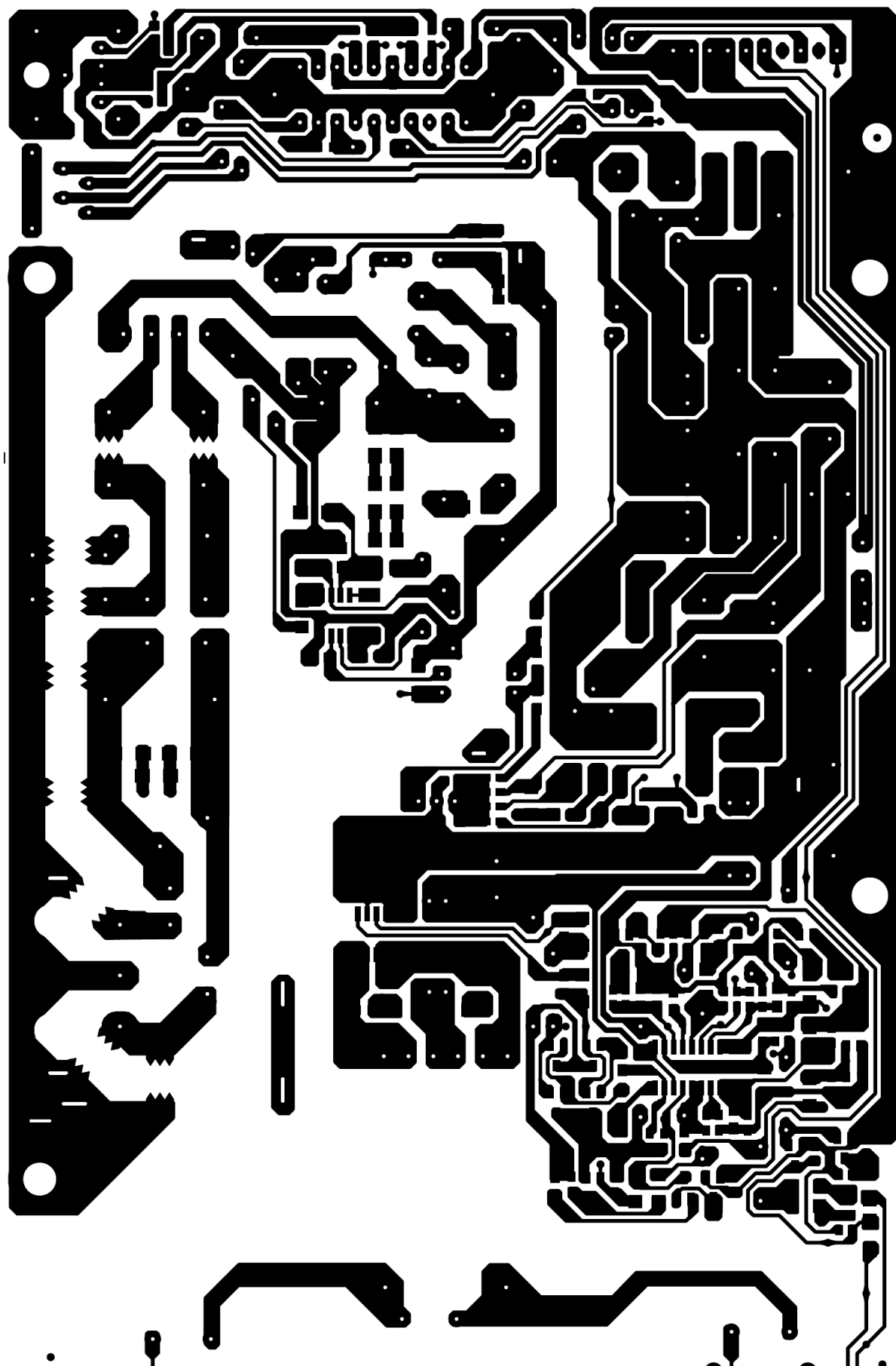
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10.2 Power Board



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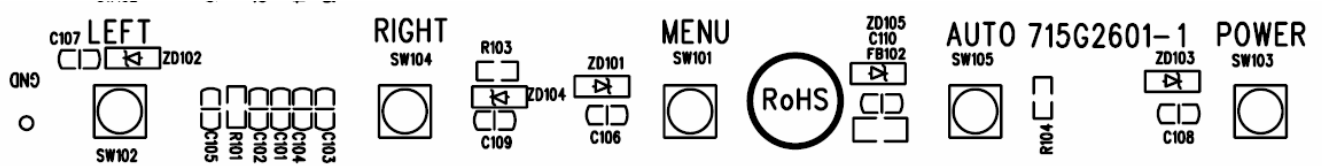
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10.3 key board



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11. Maintainability

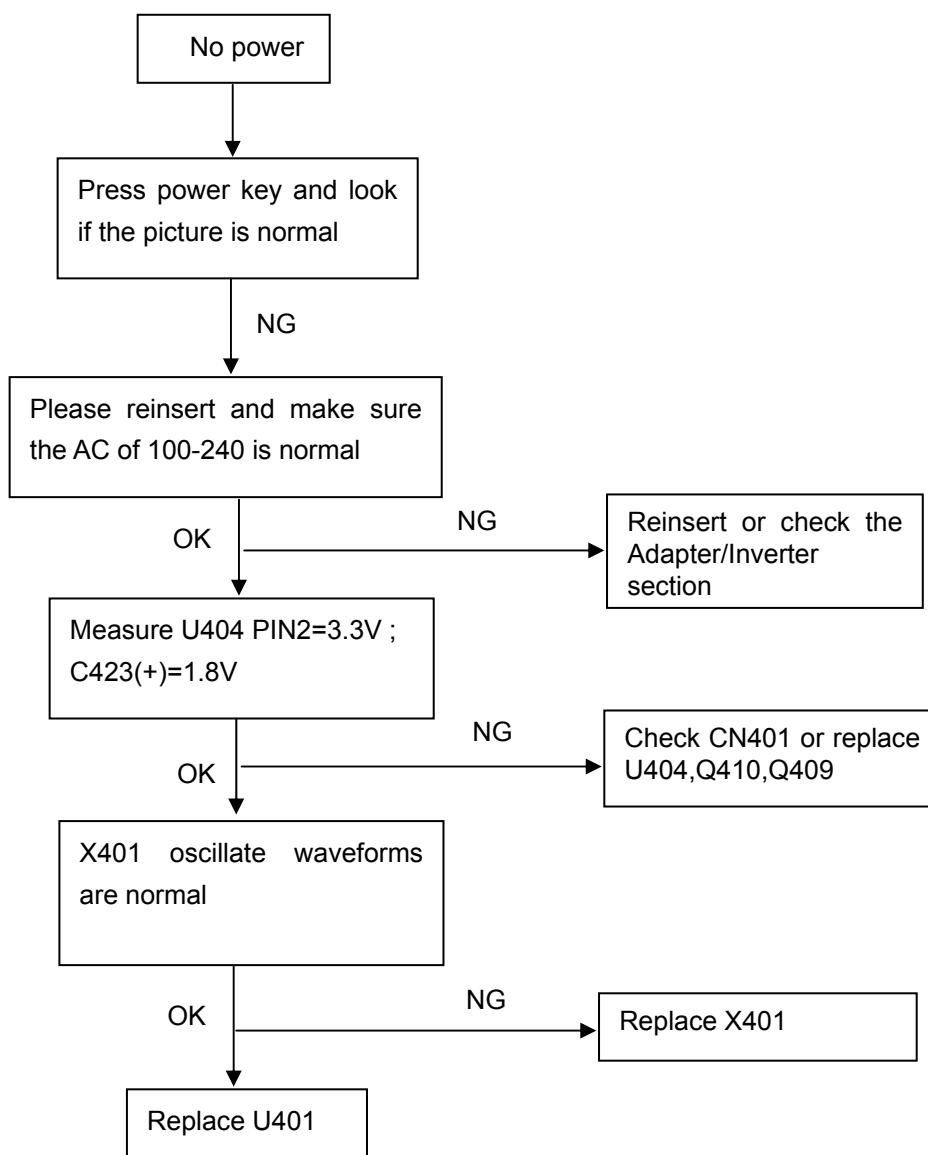
11.1 Equipments and Tools Requirement

1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

11.2 Trouble Shooting

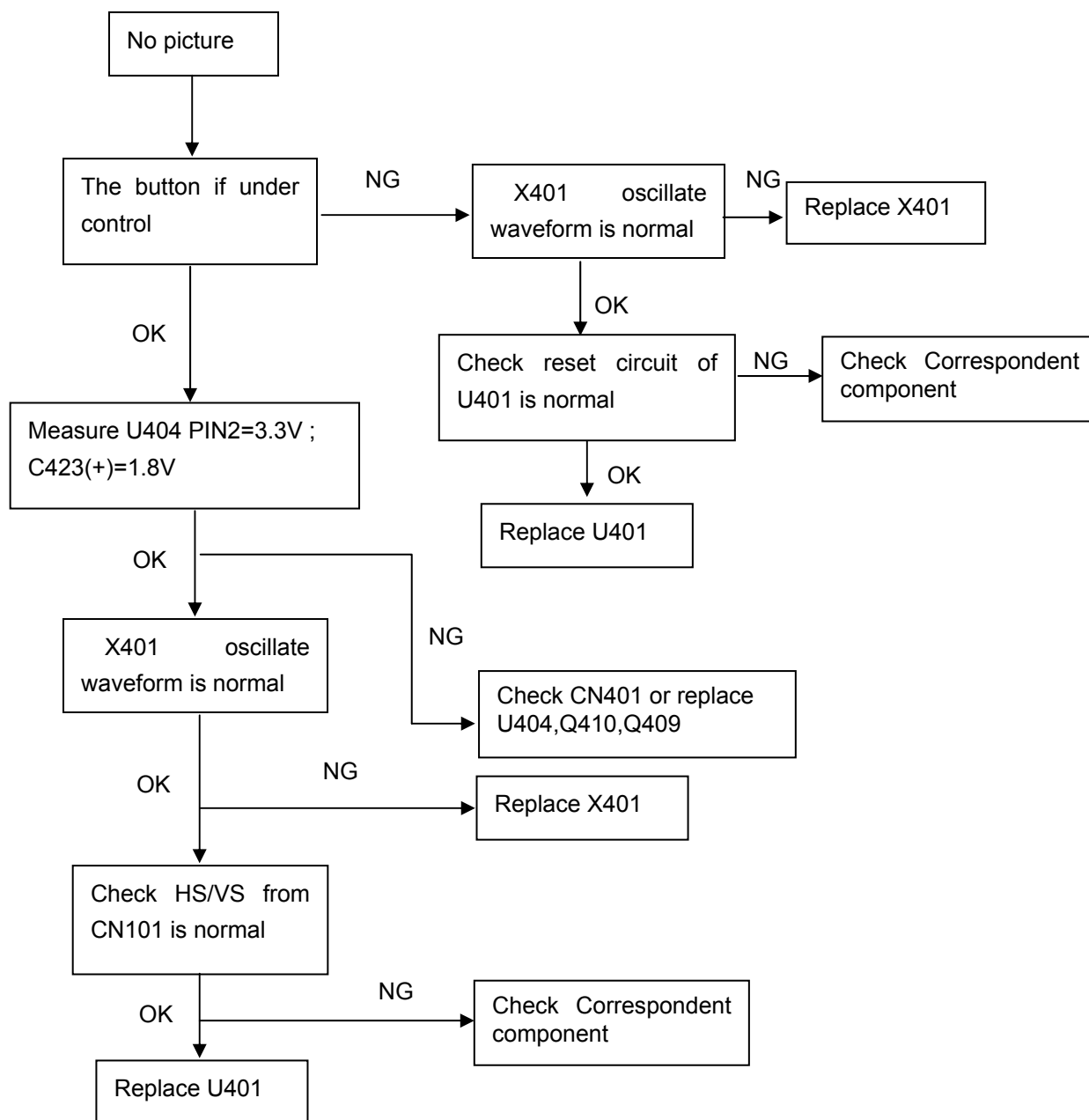
11.2.1 Main Board

No power



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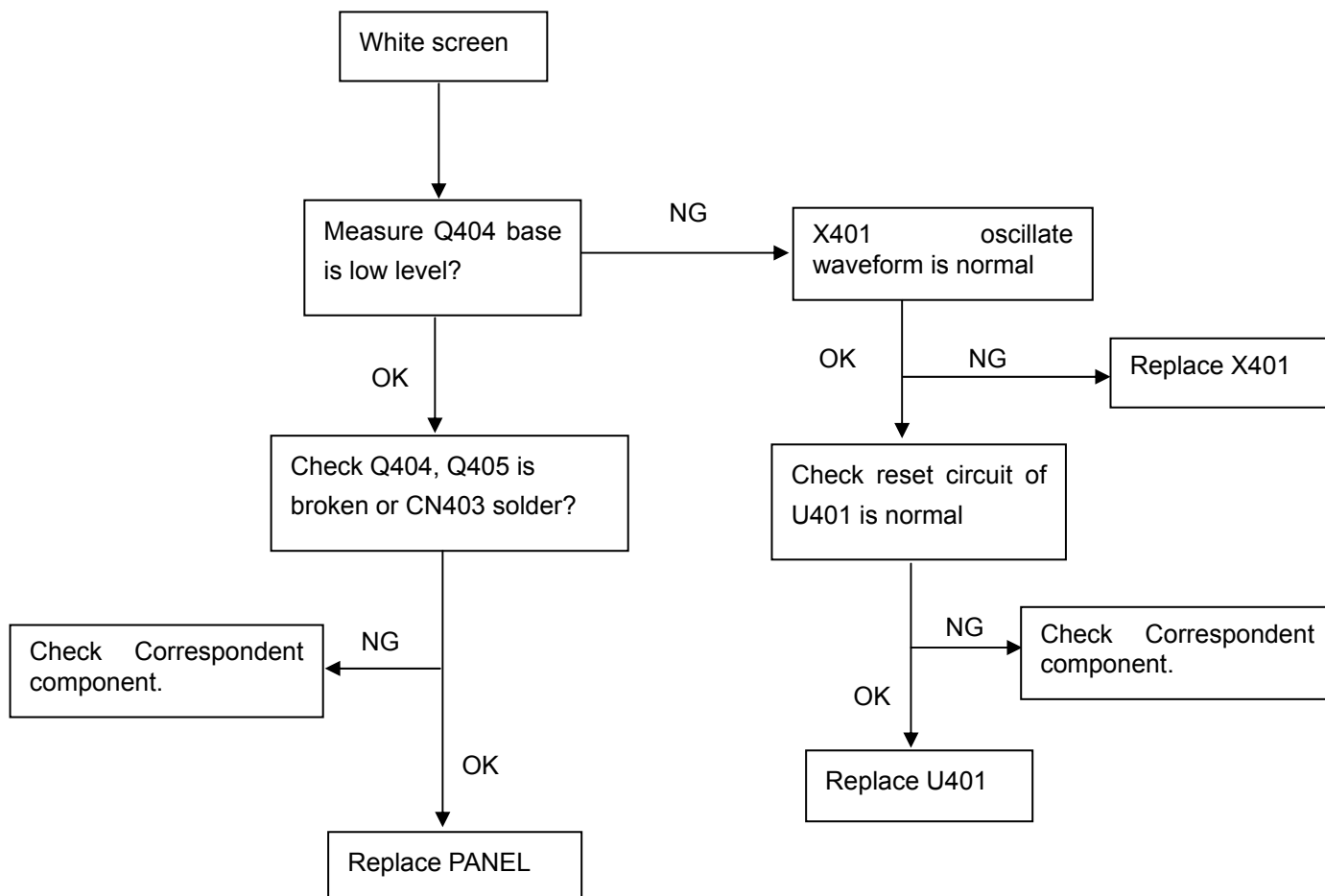
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No picture (LED orange)

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White screen

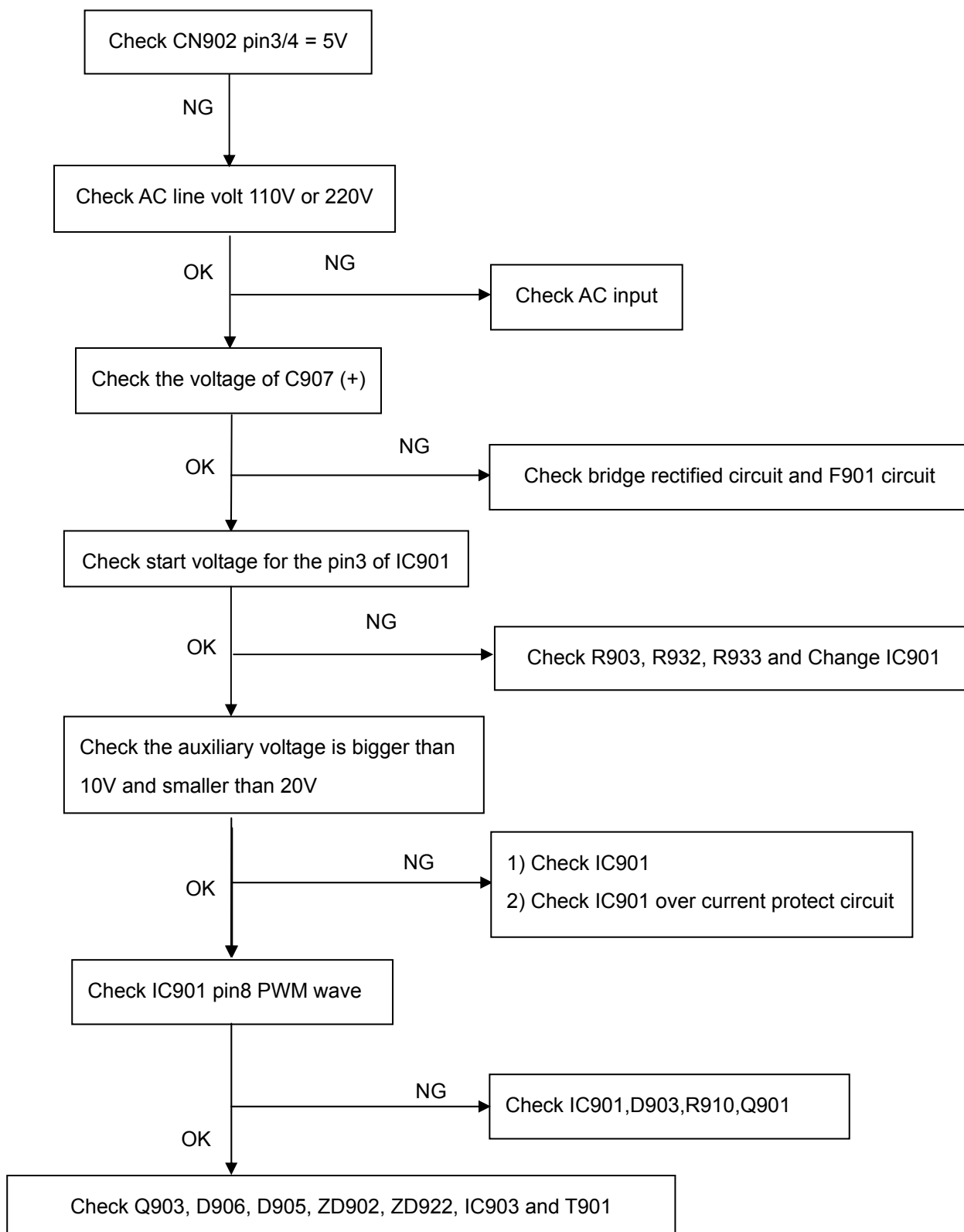


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11.2.2 Power Board

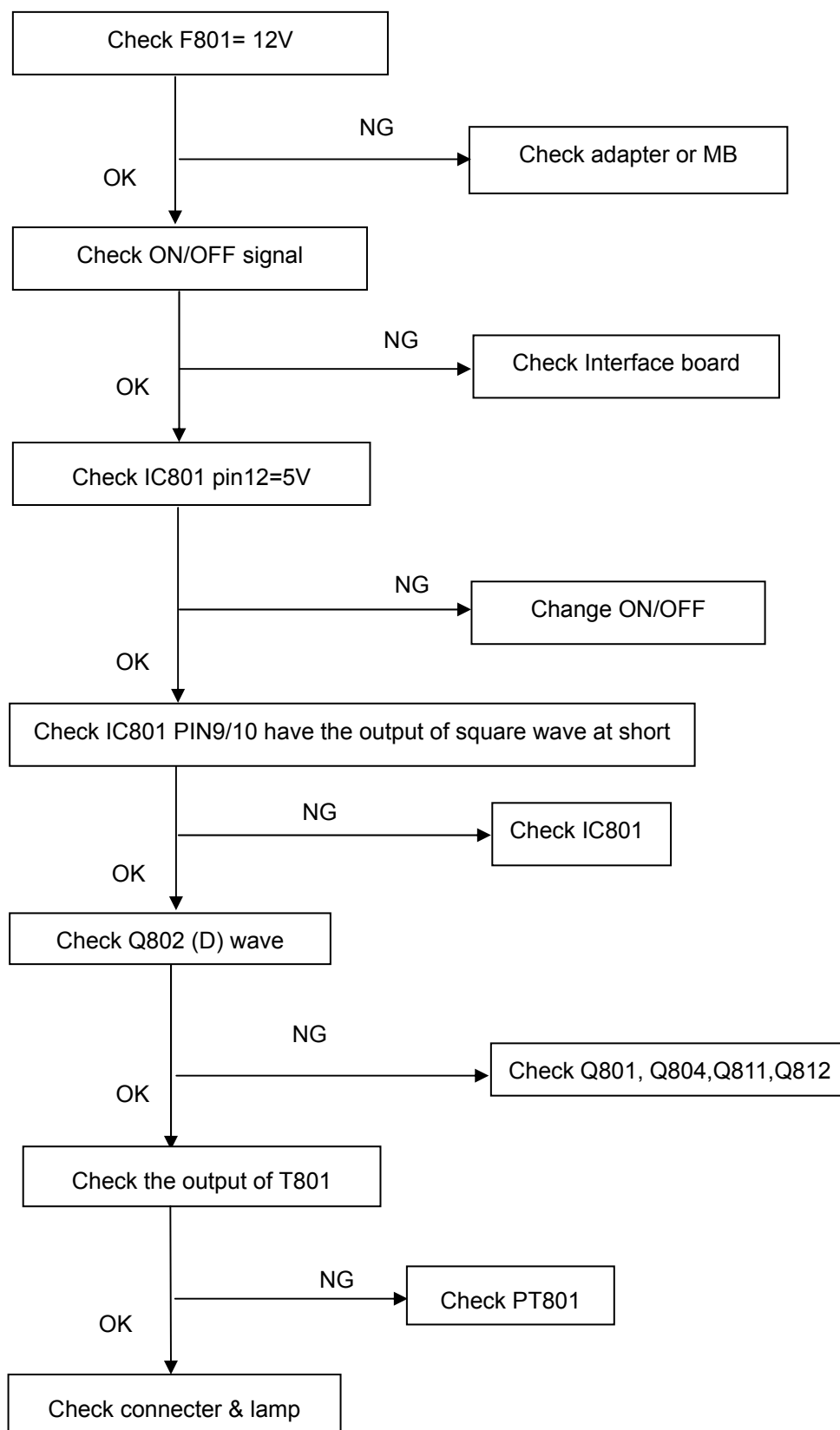
1) No power



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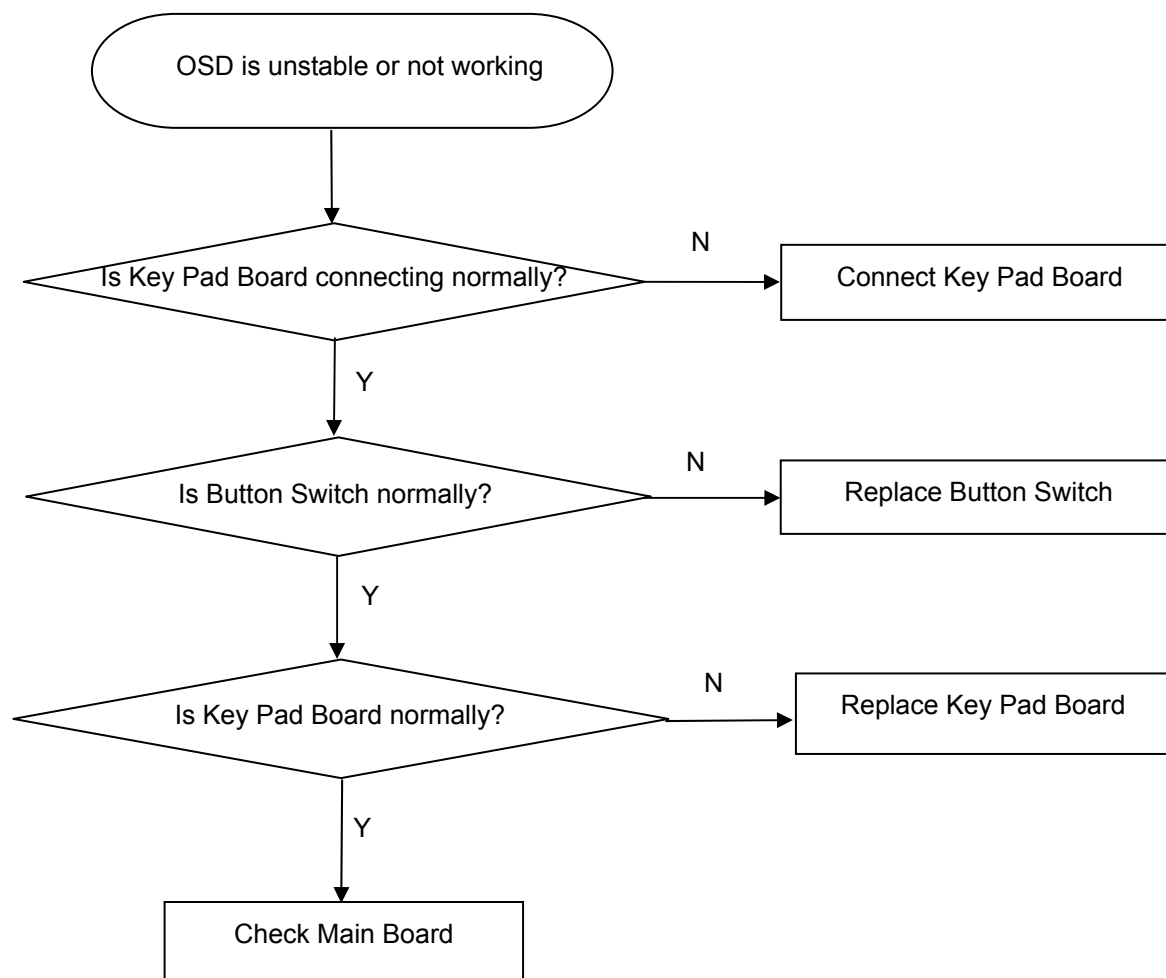
2.) No Backlight



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11.2.3 Key Board



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12. DDC Instruction

General

DDC Data Re-programming

In case the main EEPROM with Software DDC which store all factory settings were replaced because a defect, repaired monitor' the serial numbers have to be re-programmed.

It is advised to re- soldered the main EEPROM with Software DDC from the old board onto the new board if circuit board have been replaced, in this case the DDC data does not need to be re-programmed.

Additional information about DDC (Display Data Channel) may be obtained from Video Electronics Standards Association (VESA). Extended Display Identification Data (EDID) information may be also obtained from VESA.

1. An i486 (or above) personal computer or compatible.
2. Microsoft operation system Windows 95/98/2000/XP.
3. " PORT95NT.exe, WinDDC_ setup" program.
4. Software OSD SN Alignment kits

The kit contents:

- a. OSD SN BOARD x1
- b. Printer cablex1
- c. VGA cable x1
- d. Digital cable x1
- e. 12V DC power source

1. Install the "PORT95NT.EXE", and restart the computer.

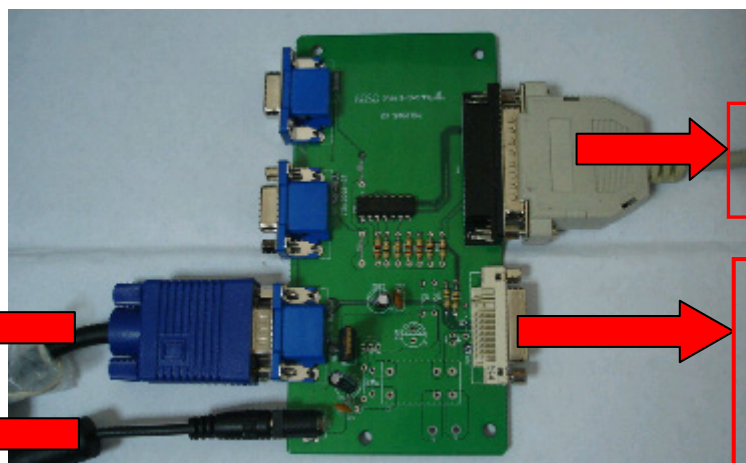
2. Install the "WinDDC_ setup"

3. Connect the DDC board as follow:

(Take philips 190B8 for example)

When you write analog EDID, Connect this port to the Philips 190B8's VGA port

12V Input



Connect to the PC LPT

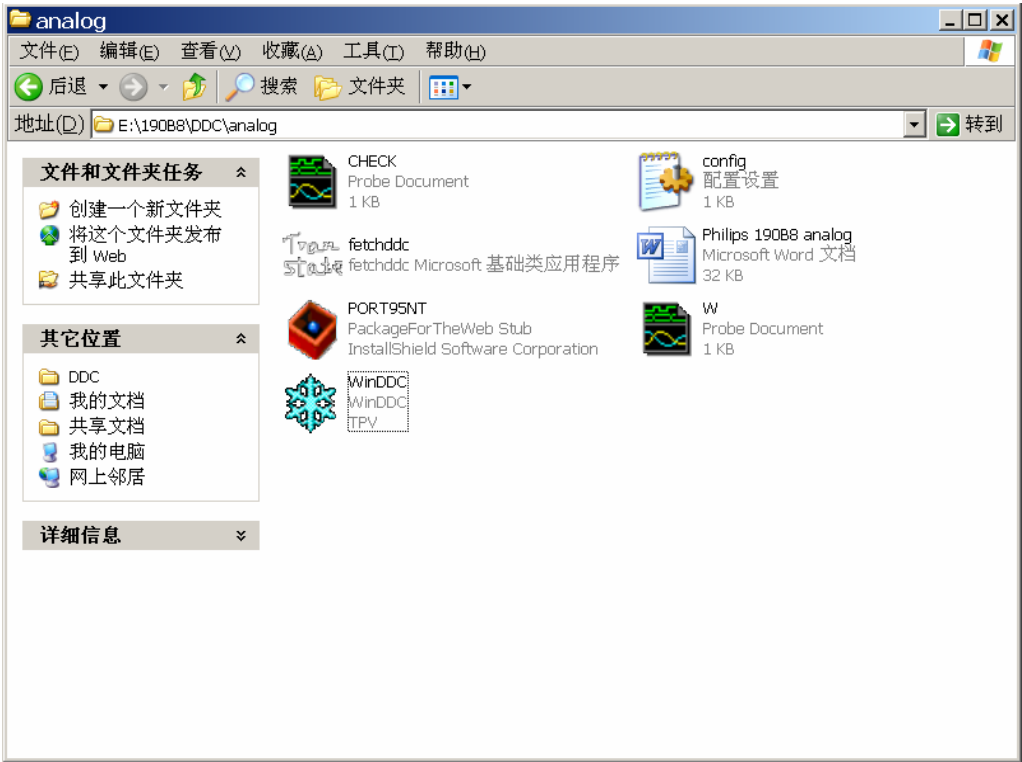
When you write digital EDID, Connect this port to the Philips 190B8's DVI port

Note: Pin5 of the VGA cable which connects to the monitor should be cut off.

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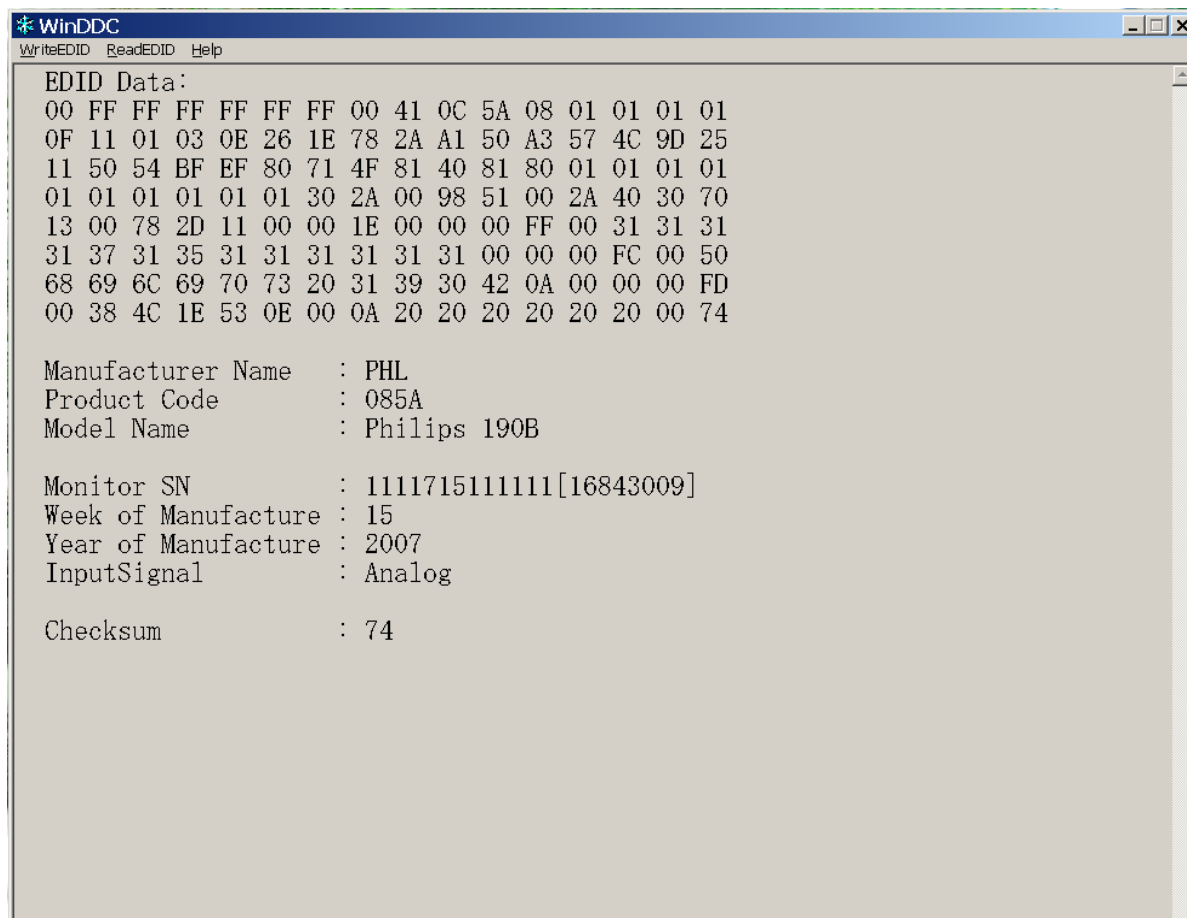
4. Take analog DDC write for example, as follow



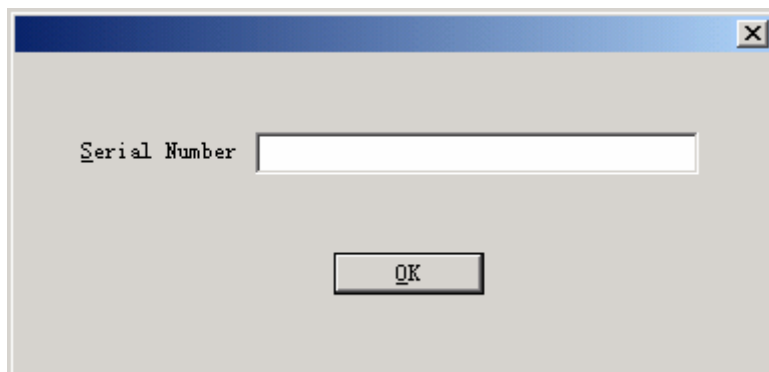
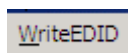
a. Double-click **WinDDC.exe**, appear as follow Figs:

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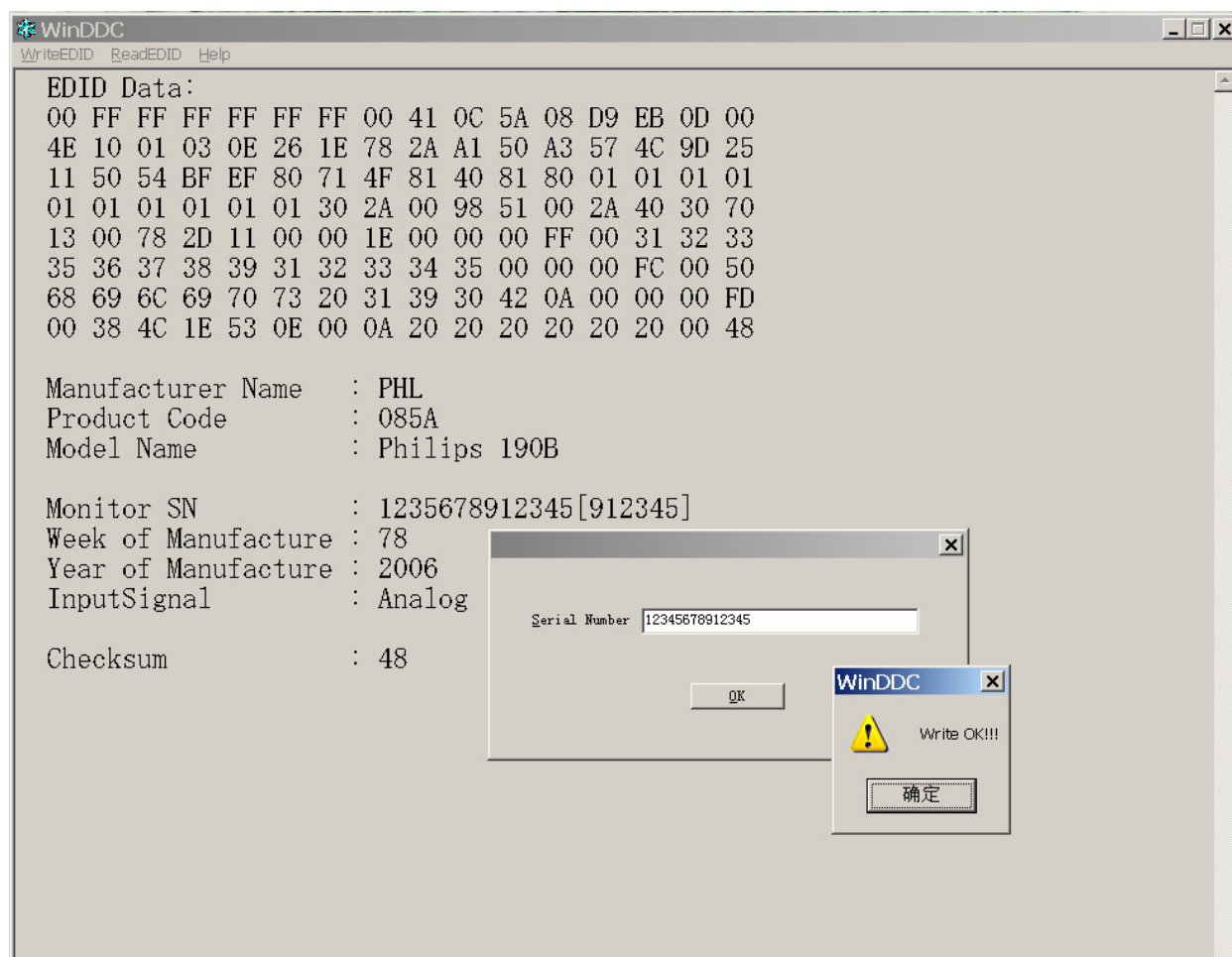
b. Click



c. Key 14 numbers in the Serial Number blank, then click "OK". Now analog DDC Write completes, as follow.

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Note: The way of digital DDC write is the same as analog DDC write.

HG171A EDID

128 bytes EDID Data (Hex):

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

```

0:  00 FF FF FF FF FF FF 00 22 64 D1 1B sn sn  sn sn
16: ww yy 01 03 0A 25 17 78 EA B6 90 A6 54 51 91 25
32: 17 50 54 BF EF 80 81 80 81 C0 81 40 71 4F 61 46
48: 90 4F 95 0F 01 01 9A 29 A0 D0 51 84 22 30 50 98
64: 36 00 72 E6 10 00 00 1E 00 00 00 FD 00 sn sn sn
80: sn sn sn sn sn sn sn sn sn sn sn 00 00 00 FF 00 32
96: 33 31 31 32 33 31 32 33 31 32 33 33 00 00 00 FC
112: 00 48 61 6E 6E 73 2E 47 20 48 47 31 37 31 00 D2
  
```

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Decoded EDID data

<---Header--->

Header: 00 FF FF FF FF FF FF 00

<-x-Header-x->

<---Vendor/Product Identification--->

ID Manufacturer Name: HSD
 ID Product Code: 1BD1
 ID Serial Number: 000004d1
 Week of Manufacture: 16
 Year of Manufacture: 2007

<-x-Vendor/Product Identification-x->

<---EDID Structure Version/Revision--->

EDID Version#: 01
 EDID Revision#: 03

<-x-EDID Structure Version/Revision-x->

<---Basic Display Parameters/Features--->

Video i/p definition: Analog
 Signal Level Standard: 0.700V/0.300V(0.700Vpp)
 Setup: Blank-to-Black not expected
 Separate Sync Support: Yes
 Composite Sync Support: No
 Sync. on green video supported: Yes
 Serration of the Vsync.Pulse is not required.
 Max. H. Image Size : 37cm.
 Max. V. Image Size : 23cm.
 Display Gamma: 2.2
 DPMS Features, Stand-by: Yes.
 DPMS Features, Suspend: Yes.
 DPMS Features, Active off: Yes.
 Display Type: R/G/B color display.
 Preferred Timing Mode: Yes.

<---Basic Display Parameters/Features--->

<---Color Characteristics--->

Red x: 0.6503906250
 Red y: 0.3310546875
 Green x: 0.3173828125
 Green y: 0.5683593750
 Blue x: 0.1464843750
 Blue y: 0.0908203125
 White x: 0.3125000000
 White y: 0.3300781250

<-x-Color Characteristics-x->

<---Established Timings--->

Established Timings 1: BF
 -720x400 @70Hz VGA,IBM
 -640x480 @60Hz VGA,IBM
 -640x480 @67Hz Apple,Mac II
 -640x480 @72Hz VESA

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-640x480 @75Hz VESA
-800x600 @56Hz VESA
-800x600 @60Hz VESA

Established Timings 2: EF

-800x600 @72Hz VESA
-800x600 @75Hz VESA
-832x624 @75Hz Apple,Mac II
-1024x768 @60Hz VESA
-1024x768 @70Hz VESA
-1024x768 @75Hz VESA
-1280x1024 @75Hz VESA

Established Timings 3: 80

-1152x870 @75Hz Apple,Mac II

<-x-Established Timings-x->

<---Standard Timing Identification--->

-1280x1024 @60
-1280x720 @60
-1280x960 @60
-1152x864 @75
-1024x768 @66
-1400x1050 @75
-1440x900 @75

<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->

Detailed Timing: 1440x900 @ 60Hz.

<-x-Detailed Timing Descriptions-x->

<---Detailed Timing Descriptions--->

Detailed Timing: FD (Monitor limits)

Min. V. rate: 55Hz
Max. V. rate: 75Hz
Min. H. rate: 30KHz
Max. H. rate: 83KHz
Max. Pixel Clock: 140MHz

Detailed Timing: FF (Monitor SN) '231123123123'

Detailed Timing: FC (Monitor Name) 'Hanns.G HG171'

<-x-Detailed Timing Descriptions-x->

Extension Flag: 00

Checksum: D2

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13. White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding White-Balance adjustment.

1. How to do the Chroma-7120 MEM. Channel setting

- A. Reference to chroma 7120 user guide
- B. Use "SC" key and "NEXT" key to modify x,y,Y value and use "ID" key to modify the TEXT description Following is the procedure to do white-balance adjust

2. Setting the color temp. you want

A. MEM.CHANNEL 3 (9300 color):

9300 color temp. parameter is $x = 283 \pm 28$, $y = 297 \pm 28$, $Y = 220 \text{cd/m}^2$

B. MEM.CHANNEL 4 (6500 color):

6500 color temp. parameter is $x = 313 \pm 28$, $y = 329 \pm 28$, $Y = 220 \text{cd/m}^2$


C. MEM.CHANNEL 9 (5500 color):

5500 color temp. parameter is $x = 333 \pm 28$, $y = 348 \pm 28$, $Y = 220 \text{cd/m}^2$

3. Enter into factory mode of HG171A:

Turn on the power, press simultaneously the MENU and AUTO buttons, then the factory OSD will be at the left top of the panel.

4. Bias adjustment:

Set the **Contrast** ZHAN to 50; Adjust the **Brightness**  to 80.

5. Gain adjustment:

Move cursor to "-F-" and press MENU key

A. Adjust 9300 color-temperature

1. Switch the Chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM. Channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x = 283 \pm 28$, $y = 297 \pm 28$, $Y = 220 \text{cd/m}^2$
4. Adjust the RED of color 1 on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN of color 1 on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE of color 1 on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance $=100 \pm 2$

B. Adjust 6500 color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x = 313 \pm 28$, $y = 329 \pm 28$, $Y = 220 \text{cd/m}^2$
4. Adjust the RED of color 2 on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN of color 2 on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE of color 2 on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance $=100 \pm 2$

C. Adjust 5500 color-temperature

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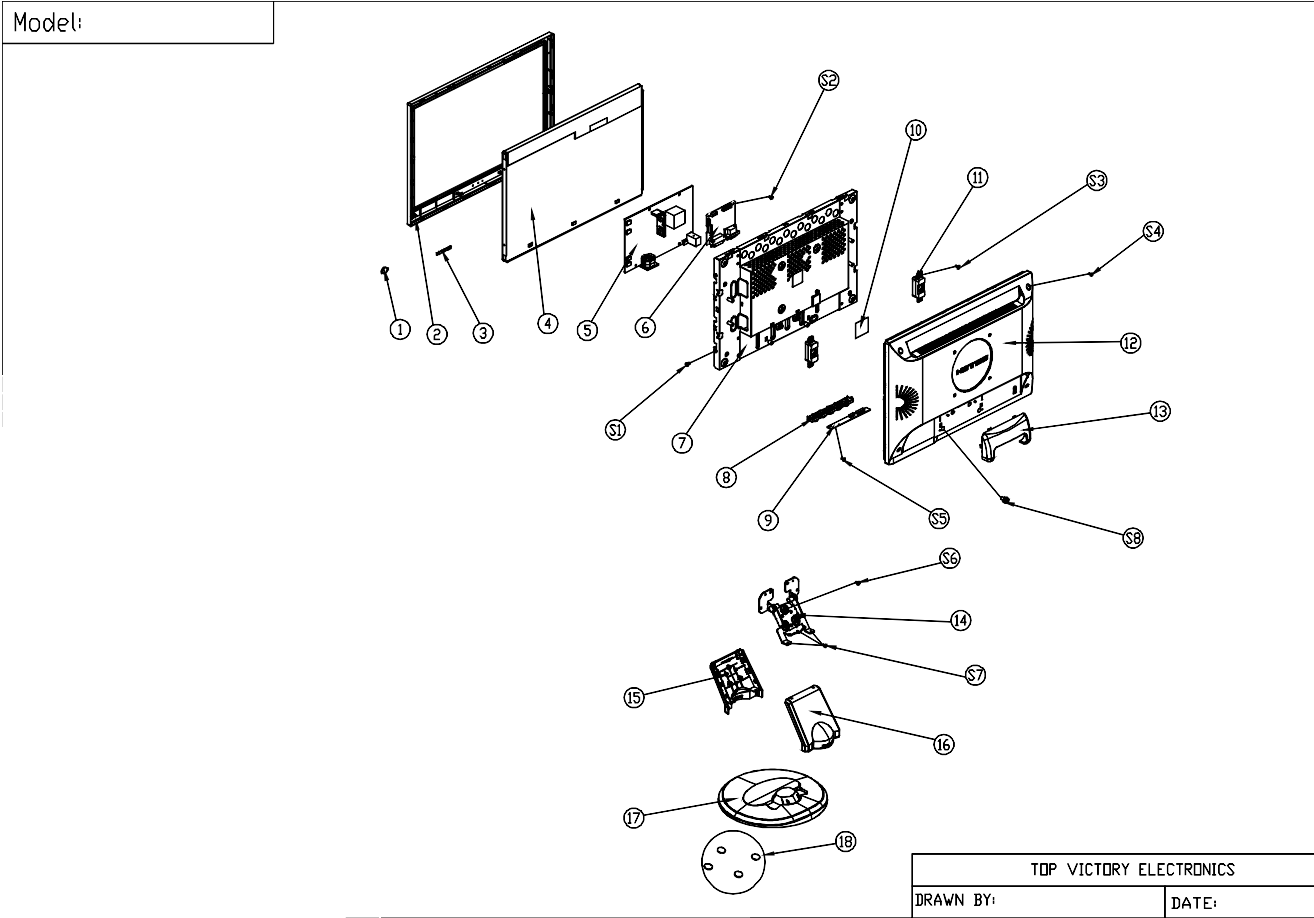
1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x = 333 \pm 28$, $y = 348 \pm 28$, $Y = 220 \text{cd/m}^2$
4. Adjust the RED of color 3 on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN of color 3 on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE of color 3 on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance $=100 \pm 2$

D. Turn the Power-button off to quit from factory mode.

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14. Monitor Exploded View



Item	Description	Item	Description
1	POWER LENS	14	HINGE
2	BEZEL	15	STAND FRONT
3	LOGO	16	STAND BACK
4	PANEL	17	BASE
5	POWER BOARD	18	PORON FOOT
6	MAIN BOARD	S1	SCREW
7	MAIN FRAME	S2	SCREW
8	KEYPAD	S3	SCREW
9	KEY BOARD	S4	SCREW
10	MYLAR	S5	SCREW
11	SPENKER	S6	SCREW
12	BACK COVER	S7	SCREW
13	HINGE COVER	S8	SCREW

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15. BOM List

T7RHM5D8AWHZNC

Location	Part NO.	Description	Remark
	050G 600 1 W	WHITE STRAP	
	050G 600 2	HANDLE1	
	050G 600 3	HANDLE2	
	052G 1150 C	INSULATING TAPE	
	052G 1185	MIDDLE TAPE	
	052G 1186	SMALL TAPE	
	052G 1211 A	Conductive Tape 55mm *45mm *0.08mm	
	052G 1211 B	Conductive Tape 85mm *40mm *0.09mm	
	052G 1211527	Conductive Tape 75mm *45mm *0.08mm	
	052G6019 1	INSULATING TAPE	
E08902	089G 725GAA DB	D-SUB CABLE	2nd source
E08902	089G 725HAA DB	D-SUB CABLE	
E08907	089G179J30N504	ffc cable	
E08907	089G179J30N504	ffc cable	2nd source
E08901	089G404A18N IS	POWER CORD/32E1818018	
E08901	089G404A18N YH	POWER CORD(32E1818018/32-D022217)	2nd source
	095G8014 6XH19	WIRE HARNESS 6P(1253HA HR)-6P(PH)	
	0M1G 130 5120	SCREW	
	0M1G 330 5225 CR3	SCREW	
	0M1G1730 6120	SCREW,42-D020523	
	0M1G1740 10120	SCREW 42A9940008	
	705GQ734421	REAR COVER/STAND ASS'Y(17")	
	0M1G1030 6120	SCREW M3X6	
	0Q1G 330 6120	SCREW 42A9930001	
	0Q1G1030 6120	SCREW	
	Q12G6600 8	PORON FOOT	
	Q33G0071 ZT 1L	KEY PAD	
	Q34G0158 ZT 2B	REAR COVER(17")	
	Q34G0160 ZT 1B	STAND-F	
	Q34G0161 ZT 1B	STAND-B	
	Q34G0162 ZT 1B 33	BASE	
	Q37G0046 1	HINGE	
	750GLH70GWB12N000R	PANEL HSD170MGW1 B00 NJ HSD	
	756GQ8CB HZ001	MAIN BOARD-CBPCRM5HZQ2	
SMT-C-U402	100GTMH7000N11	MCU ASS'Y-056G1133 81	
	A15G0207HSD 3	MAIN FRAME	
	040G 45762412B	CBPC LABEL	
CN401	033G3802 6	WAFER	
CN404	033G3802 9	WAFER 9P RIGHT ANELE PITCH	
CN403	033G801930F CH JS	CONNECTOR	

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CN101	088G 35315F H	D-SUB 15PIN	
X401	093G 22 53 H	14.31818MHZ/30PF/49US	
X401	093G 22 53 J	14.31818MHZ/32PF/49US	
C410	067G 4051007PB	EC 10uF M 50V 5*11mm	
C426	067G 4051014PB	EC 100uF M 25V 6.3*11mm	
C427	067G 4051014PB	EC 100uF M 25V 6.3*11mm	
C421	067G 4051014PB	EC 100uF M 25V 6.3*11mm	
C423	067G 4051014PB	EC 100uF M 25V 6.3*11mm	
U401	056G 562557	IC TSUM1PFR-LF	
U404	056G 563 52	IC AP1117D33L-13 TO252-3L DIODES	
U103	056G 662 13	IC AZC099-04S SOT23-6L	
U102	056G 662 13	IC AZC099-04S SOT23-6L	
Q409	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23	
Q410	057G 417 22 T	TRA KN2907AS -60V/-0.6A SOT-23	
Q404	057G 417517	LMBT3906LT1G SOT-23 BY LRC	
Q408	057G 417518	LMBT3904LT1G SOT-23 BY LRC	
Q406	057G 417518	LMBT3904LT1G SOT-23 BY LRC	
Q401	057G 763 1	A03401 SOT23 BY AOS(A1)	
Q405	057G 763 1	A03401 SOT23 BY AOS(A1)	
R456	061G0402000	RST CHIPR 0 OHM +-5% 1/16W	
R402	061G0402000	RST CHIPR 0 OHM +-5% 1/16W	
R401	061G0402000	RST CHIPR 0 OHM +-5% 1/16W	
R457	061G0402000	RST CHIPR 0 OHM +-5% 1/16W	
R102	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R103	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R104	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R108	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R110	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R111	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R113	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R442	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R420	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R419	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R418	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R413	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R412	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R411	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R405	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R117	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R115	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R114	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R441	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R118	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R408	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	

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R409	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R417	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R421	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R433	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R437	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R439	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R447	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R121	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R404	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R407	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R120	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R436	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R410	061G0402121	RST CHIP 120R 1/16W 5%	
R414	061G0402121	RST CHIP 120R 1/16W 5%	
R458	061G0402203	RST CHIP 20K 1/16W 5%	
R105	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R106	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R459	061G0402303	RST CHIPR 30 KOHM +-5% 1/16W	
R109	061G0402390 0F	RST CHIP 390R 1/16W 1%	
R403	061G0402390 0F	RST CHIP 390R 1/16W 1%	
R427	061G0402392	RST CHIP 3.9K 1/16W 5%	
R428	061G0402392	RST CHIP 3.9K 1/16W 5%	
R435	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R440	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R448	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R406	061G0402682	RST CHIP 6K8 1/16W 5%	
R107	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R112	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R116	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R101	061G0603000	RST CHIPR 0 OHM +-5% 1/10W	
R434	061G1206331	RST CHIPR 330 OHM +-5% 1/4W	
C432	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C428	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C422	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C420	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C419	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C417	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C416	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C415	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C414	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C413	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C409	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C407	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C406	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	

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C404	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C403	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C401	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C412	065G0402220 31	CHIP 22PF 50V NPO	
C411	065G0402220 31	CHIP 22PF 50V NPO	
C103	065G0402220 31	CHIP 22PF 50V NPO	
C102	065G0402220 31	CHIP 22PF 50V NPO	
C408	065G0402224 17	CAP CER 0.22UF -20%-80%	
C113	065G0402473 12	CHIP 0.047uF 16V X7R	
C110	065G0402473 12	CHIP 0.047uF 16V X7R	
C109	065G0402473 12	CHIP 0.047uF 16V X7R	
C107	065G0402473 12	CHIP 0.047uF 16V X7R	
C106	065G0402473 12	CHIP 0.047uF 16V X7R	
C105	065G0402473 12	CHIP 0.047uF 16V X7R	
C101	065G0402473 12	CHIP 0.047uF 16V X7R	
C111	065G0402509 31	CHIP 5pF 50V NPO	
C104	065G0402509 31	CHIP 5pF 50V NPO	
C108	065G0402509 31	CHIP 5pF 50V NPO	
FB402	071G 56K121 M	CHIP BEAD	
FB401	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill	
FB101	071G 59K190 B	19 OHM BEAD	
FB102	071G 59K190 B	19 OHM BEAD	
FB103	071G 59K190 B	19 OHM BEAD	
D401	093G 64 33	DIO SIG SM BAV99 (PHSE)R	
ZD103	093G 39S 34 T	UDZSNP5.6B ROHM	
ZD104	093G 39S 34 T	UDZSNP5.6B ROHM	
D402	093G3004 3	SM340A	
	715G2904 1 9	MAIN PCB 57x64x1.6mm DS	
	KEPC8QH2	KEY G2601-2-X-X-3-080815	
CN101	033G8032 6F HR	CONNECTOR	
R103	061G0603182	RST CHIPR 1.8 KOHM +-5% 1/10W	
R102	061G0603182	RST CHIPR 1.8 KOHM +-5% 1/10W	
R104	061G0603302	RST CHIPR 3 KOHM +-5% 1/10W	
R101	061G0603302	RST CHIPR 3 KOHM +-5% 1/10W	
C111	065G0603104 32	CHIP 0.1UF 50V X7R	
C110	065G0603104 32	CHIP 0.1UF 50V X7R	
C109	065G0603104 32	CHIP 0.1UF 50V X7R	
C108	065G0603104 32	CHIP 0.1UF 50V X7R	
C107	065G0603104 32	CHIP 0.1UF 50V X7R	
C106	065G0603104 32	CHIP 0.1UF 50V X7R	
FB102	071G 56K121 M	CHIP BEAD	
SW104	077G 604 2 TO	TACT 5W BY TOUKE TS-9-TMG-553	
SW105	077G 604 2 TO	TACT 5W BY TOUKE TS-9-TMG-553	
SW103	077G 604 2 TO	TACT 5W BY TOUKE TS-9-TMG-553	

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SW101	077G 604 2 TO	TACT 5W BY TOUKE TS-9-TMG-553	
SW102	077G 604 2 TO	TACT 5W BY TOUKE TS-9-TMG-553	
LED101	081G 15502 GP	LED GPTD12048YGC1	
ZD101	093G 39S 34 T	UDZSNP5.6B ROHM	
ZD102	093G 39S 34 T	UDZSNP5.6B ROHM	
ZD103	093G 39S 34 T	UDZSNP5.6B ROHM	
ZD104	093G 39S 34 T	UDZSNP5.6B ROHM	
ZD105	093G 39S 34 T	UDZSNP5.6B ROHM	
ZD106	093G 39S 34 T	UDZSNP5.6B ROHM	
	715G2601 1 2	KEY PCB FR-4 T1.2MM 112X12.3MM	
	PWPC8721HQFD	POWER G2545-2-2-X-3-080821	
	040G 45762412B	CBPC LABEL	
GND1	009G6005 1	GROUND TERMINAL	
CN802	033G8020 2D U	WAFER	2nd source
CN801	033G8020 2D U	WAFER	2nd source
CN801	033G8020 2E F	CONNECTOR	
CN802	033G8020 2E F	CONNECTOR	
IC903	056G 139 3A	IC PC123Y22FZ0F	
NR901	061G 58080 WT	8 OHM NCT	
C903	063G107K474 US	0.47UF +-10%	
C801	065G 6J1506ET	15PF 5% SL 6KV	
C901	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C902	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C921	065G306M3322BP	3300PF 20%	
C907	067G 40Z10115K	CAP 105℃ 100UF M 450V	
C802	067G215D4714KV	E.C 105℃ CAP 470UF M 25V ED SERIES	
C918	067G215D6814KV	CAP 105℃ 680uF M 25V	
C917	067G215D6814KV	CAP 105℃ 680uF M 25V	
C940	067G215S1023KV	105℃ 1000UF M 16V	
C939	067G215S1023KV	105℃ 1000UF M 16V	
C915	067G215S4713KV	EC 105℃ CAP 470UF M 16V	
C922	067G215Y4714HV	EC 105℃ CAP 470UF M 25V	
L902	073G 174 65 H	LINE FILTER	
T901	080GL17T 33 DN	XFMR FOR POWER Darfon	
CN901	087G 501 32 S	AC SOCKET	
BD901	093G 50460 28	BRIDGE DIODE KBP208G LITEON	
CN902	095G801410D 51	HARNESS 10P-9P 110mm	2nd source
CN902	095G801410E 51	WIRE HARNESS	
	705GQ7 57001	Q901 ASS'Y	
Q901	057G 724 11	STP9NK65ZFP	
HS3	090G6263 1	HEAT SINK	
	0M1G1730 8120	SCREW	
	705GQ7 93001	D905 ASS'Y	
HS4	090G6084 1	HEAT SINK	

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D905	093G 60257	DIODE SB1060FCT ITO-220AB BY PAN JIT	
	0M1G1730 8120	SCREW	
	705GQ761006	R908 ASS'Y	
R908	061G152M10458F	100K OHM 5% 2W	
	096G 29 6	H.S. TUBE	
	705GQ761007	R914 ASS'Y	
R914	061G152M478 64	0.47 OHM 5% 2W	
	096G 29 1	SHRINK TUBE UL/CSA	
	705GQ793012	D906 ASS'Y	
D906	093G 60218	SB10100FCT	
	0M1G1730 8120	SCREW	
HS2	Q90G6263 2	HEAT SINK	
IC801	056G 379 22	IC TL494IDR SOIC-16	
IC901	056G 379 76	IC LD7552BPS SOP-8	
Q903	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q811	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q806	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)	
Q804	057G 417 6	PMBS3906/PHILIPS-SMT(06)	
Q812	057G 417 6	PMBS3906/PHILIPS-SMT(06)	
Q809	057G 759 2	RK7002	
Q810	057G 759 2	RK7002	
Q808	057G 760 4B	PDTA144WK SOT346	
Q805	057G 760 5B	PDTC144WK SOT346	
Q802	057G 763 14	AM9945N	
R823	061G0603000	RST CHIPR 0 OHM +-5% 1/10W	
R801	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R818	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R824	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R808	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R814	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R827	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R926	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R942	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R807	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R817	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R820	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R828	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R832	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R863	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R813	061G0603102	RST CHIPR 1K OHM +-5% 1/10W	
R862	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R835	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R803	061G0603106	RST CHIPR 10M OHM +-5% 1/10W	

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R930	061G0603243 1F	RST CHIPR 2.43K OHM +-1% 1/10W	
R940	061G0603330 2F	RST CHIPR 33K OHM +-1% 1/10W	
R927	061G0603360 1F	RST CHIPR 3.6K OHM +-1% 1/10W	
R802	061G0603470 1F	RST CHIPR 4.7 KOHM +-1% 1/10W	
R811	061G0603472	RST CHIPR 4.7K OHM +-5% 1/10W	
R841	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W	
R853	061G0603683	RST CHIPR 68K OHM +-5% 1/10W	
R831	061G0805100 1F	RST CHIPR 1K OHM +-1% 1/8W	
R915	061G0805100 3F	RST CHIPR 100KOHM +-1% 1/8W	
R804	061G0805101	1ST CHIPR 100 OHM +-5% 1/8W	
R925	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R826	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R943	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R938	061G0805103	RST CHIPR 10K OHM +-5% 1/8W	
R924	061G0805151	RST CHIPR 150 OHM +-5% 1/8W	
R829	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R825	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R839	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R850	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R837	061G0805473	RST CHIPR 47K OHM +-5% 1/8W	
R810	061G0805510 2F	RST CHIPR 51K OHM +-1% 1/8W	
F801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR901	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
JR902	061G1206000	RST CHIPR 0 OHM +-5% 1/4W	
R910	061G1206100	RST CHIPR 10 OHM +-5% 1/4W	
R821	061G1206100 1F	RST CHIPR 1K OHM +-1% 1/4W	
R822	061G1206100 1F	RST CHIPR 1K OHM +-1% 1/4W	
R918	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R919	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R920	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R935	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R961	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R962	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R946	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R945	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R944	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R941	061G1206102	RST CHIPR 1k OHM +-5% 1/4W	
R912	061G1206221	RST CHIPR 220 OHM +-5% 1/4W	
R904	061G1206304	RST CHIPR 300k OHM +-5% 1/4W	
R933	061G1206304	RST CHIPR 300k OHM +-5% 1/4W	
R932	061G1206304	RST CHIPR 300k OHM +-5% 1/4W	
R855	061G1206330	RST CHIPR 33 OHM +-5% 1/4W	
R856	061G1206330	RST CHIPR 33 OHM +-5% 1/4W	

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R909	061G1206519	RST CHIPR 5.1 OHM +-5% 1/4W	
R900	061G1206684	RST CHIPR 680K OHM +-5% 1/4W	
R901	061G1206684	RST CHIPR 680K OHM +-5% 1/4W	
R902	061G1206684	RST CHIPR 680K OHM +-5% 1/4W	
C842	065G0603103 32	CAP CHIP 0603 0.01UF K 50V X7R	
C807	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C821	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C825	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C834	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R	
C819	065G0603222 22	CHIP 2200PF 25V X7R	
C823	065G0603222 22	CHIP 2200PF 25V X7R	
C932	065G0805102 31	CAP CHIP 0805 1000PF J 50V NPO	
C839	065G0805102 31	CAP CHIP 0805 1000PF J 50V NPO	
C838	065G0805102 31	CAP CHIP 0805 1000PF J 50V NPO	
C928	065G0805103 32	CAP CHIP 0805 10NF K 50V X7R	
C930	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C924	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C916	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C905	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C824	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C845	065G0805105 22	CAP CHIP 0805 1uF K 25V X7R	
C822	065G0805105 22	CAP CHIP 0805 1uF K 25V X7R	
C820	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO	
C909	065G0805471 21	CAP CHIP 0805 470PF J 25V NPO	
C912	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C929	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
D805	093G 6432S	1N4148W	
D806	093G 6432S	1N4148W	
D807	093G 6432S	1N4148W	
D812	093G 6432S	1N4148W	
D813	093G 6432S	1N4148W	
D814	093G 6432S	1N4148W	
D817	093G 6432S	1N4148W	
D903	093G 6432S	1N4148W	
D915	093G 6432S	1N4148W	
D916	093G 6432S	1N4148W	
D802	093G 6433P	BAV99	
D801	093G 6433P	BAV99	
ZD801	093G 39S 10 T	RLZ6.8B BY ROHM	
ZD906	093G 39S 20 T	RLZ22B LLDS	
ZD922	093G 39S 25 T	RLZ5.1B LLDS	
ZD902	093G 39S 40 T	RLZ 13B LLDS	
ZD921	093G 39S 40 T	RLZ 13B LLDS	
ZD905	093G 39S 44 T	RLZ18B LLDS	

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CN901	006G 31500	EYELET	
T901	006G 31502	1.5MM RIVET	
IC904	056G 158 12	KIA431A-AT/P TO-92	
C938	065G 1K152 1T	1.5NF/1KV Z5F+-10%	
C906	065G 2K152 1T GP	CERAMIC CAP	
C908	067G215Y2207KT	CAP 105℃ 22UF M 50V KINGNICH	
FB801	071G 55 9 T	FERRITE BEAD	
FB901	071G 55 29	FERRITE BEAD	
F901	084G 55 7W	FUSE 3.15A 250V Wickmann	
F903	084G 56 4W	FUSE 4.0A 250V	
D900	093G 6026T52T	RECTIFIER DIODE FR107	
D901	093G 6038T52T	FR103	
	715G2545 2 2	POWER-PCB FR-1 193x124x1.6MM SS	
L901	S73G17476V	LINE FILTER ASS'Y	
L903	S73G25391V1	CHOKO COIL ASS'Y	
L904	S73G25391V1	CHOKO COIL ASS'Y	
	Q34FPE19P06	CASE EEL19	
	071FPE19301 02	FP2 EEL19 01	
	Q05G6069 1	WASHER	
	Q23G3178850 1A	LOGO	
	Q33G0072 Y 1X	POWER LENS	
	Q34G0157 ASA1B 30	BEZEL L17W06A-hanns2	
	Q34G0159 ZT 1B	HINGE COVER	
	Q44G7048 1	EPS	
	Q44G7048 2	EPS	
	Q44G7048 3EPE	EPE	
	Q44G7048624 1A	CARTON	
	Q45G 77 5	PE PACKING	
	Q45G 88607 35	PE BAG FOR BASE	
	Q45G 88609102	EPE BAG FOR MONITOR	
	Q52G6020 44	PROTECT FILM	

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16. Different Parts List

Diversity of T7RHM5DBAWZ3NN compared with T7RHM5D8AWHZNC			
Location	Part No.	Description	Remark
	089G410A18N IS	POWER CORD 32E1818020	
E09502	095G8014 6DH39	HARNESS 6P(A1253HA HR)-6P(PH) 300mm	2nd source
E09502	095G8014 6XH39	HARNESS 6P(A1253HA HR)-6P(PH) 300mm	
E750	750GLH70GWB12M000R	PANEL HSD170MGW1 B00 NJ HSD	
E750	750GLH70GWB1WM000R	PANEL HSD170MGW1-B00 WH HSD	2nd source
	Q40G 58170931A	HT POT LABEL	
	Q40G000260811A	Basic label	
	Q40G0002850 2A	EPA LABEL	
	Q40G0002850 3A	Seal label	
	Q44G7048850 4A	17"LCD CARTON	
	Q45G 76 28A32	PE BAG	
E08907	S89G179T30N504	LVDS ASSY	
	089F80002203AG	1.0*30*2.5-220-3-0.65*0.05	
	033F303FH10BK3	F1010HA-30P-BK	
	033F303FJSHK30	1.0S-19-30A	
	044F3231 167C7	30*11.5*0.1	
	044F3231 167C2	SEKISUI5760#W=25	
	044F3231 167C4	5760 EVA (30*10*0.8mm)	
	Q41G780085016C	warranty card	
	Q41G780085030A	QSG(HG171A)	
	Q70G7008850 7A	CD MANUAL(HG171A)	
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG	
	P40GD000813 9A	FAMILY SHEET	